

# Ad Hoc Committee on Strategic Planning for the Journals Program

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## Final Report

The Envisioned Future for the ASHA Journals Program

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## **EXECUTIVE SUMMARY**

The Ad Hoc Committee on Strategic Planning for the Journals Program has developed a strategic plan that reflects a year-long examination of the scholarly publishing industry and a comprehensive examination of the structure, operations, and capabilities of the ASHA Journals program.

#### **GOAL**

Scholarly publishing is a cyclical process in which knowledge translation fuels subsequent scientific inquiry and accelerates the development of the evidence base for professional practice. Therefore, the Committee recommends the following strategic goal for the program: Maximize the knowledge translation potential of research and research-based content.

Achievement of this goal will lead to the following outcomes:

- The knowledge base represented by the journals is comprehensive, highly accessible, highly relevant, and highly used.
- ASHA is recognized as the preeminent source for compiled knowledge in communication sciences and disorders.
- ASHA has highly favorable publishing relationships with key organizations and a wide range of researchers, including international scholars.
- Researchers participate extensively in the publishing enterprise because it is mutually beneficial.
- Published evidence and translation of that evidence is leading to improvements in clinical service delivery and outcomes for those with communication and related disorders.
- Clinical practice research is more prevalent, accessed, and used than it has historically been.

#### **NEED**

The ASHA Journals program is operating in an era of rapid change in research communication, publishing technology, and information consumption. However, structural limitations in how the program operates are reducing its ability to keep pace with growth in both the industry and the discipline. As a result, other publishers are more able to attract the authors and volunteers involved in peer review and editorial oversight who are the life blood of the program. Over time, continued operation in the current direction will reduce the relevancy and impact of the journals.

To retain and grow market share, the ASHA Journals program must make transformational changes in all phases of the scholarly publishing lifecycle. As articulated in the Association's Envisioned Future and in the Strategic Pathway to Excellence (2015–2025), enhancements to the publication and knowledge translation efforts are top priorities for transformational change. The recommended changes will help the Association, its members, and the discipline gain maximum impact from the ASHA Journals program in the course of that transformational change.

#### **RECOMMENDATIONS**

The Committee recommends focused efforts in the form of three initiatives:

- 1. Ensure the Sustainability and Effectiveness of Editorial Oversight and Peer Review
- 2. Increase Strategic Content Development
- 3. Grow the Visibility, Impact, and Use of the Journals

These initiatives together comprise 10 milestones. These milestones are listed below and their associated deliverables and process recommendations are detailed in the strategic plan.

Ensure the Sustainability and Effectiveness of Editorial Oversight and Peer Review

- Transition to an Editorial Board Model
- Create a Journals Board
- Improve the Quality and Culture of Peer Review

Increase Strategic Content Development

- Refine the Content Portfolio
- Facilitate Content Recruitment by Editors-in-Chief and Editors
- Increase Author Engagement

Grow the Visibility, Impact, and Use of the Journals

- Develop a Rapid Publication Model
- Expand Content Curation
- Broaden the Subscription Base and Product Offerings
- Expand Knowledge Translation Efforts

The annual and one-time costs associated with these recommendations are as follows:

1. Transition to the Editorial Board Model

Recommendations	Estimated OCB Costs (Starting in 2017)
1. Editorial Board (175 x \$400)	\$70,000
2. Editor-in-Chief (6 x \$5,000)	\$30,000
3. Editors (40 x \$2,500)	\$100,000

4. Journals Board (13 members x 3 days)	\$20,000
Annual Costs of Editorial Board Model	\$220,00
5. Calibration Kick-Off Meeting (50 x 3 days in 2017)	\$80,000
Total OCB Costs in 2017	\$300,000

## 2. Improving Peer-Review Quality and Culture

Recommendations	Annual Costs (Starting in 2016)
Peer-Review Knowledgebase and Helpdesk (Zendesk)	\$500
2. Peer-Review Academy (Edanz)	\$7,500
Author Gateway     (ASHAWire webpage development)	\$0
Author Knowledgebase and Helpdesk     Zendesk	\$500
5. Author Academy (Edanz)	\$7,500
Total Annual Costs	\$16,000

## 3. Expanding Content Curation, Knowledge Translation, and Subscription Marketing

Re	commendations	Annual Costs (Starting in 2016)
1.	Author Interviews	\$7,500
2.	GrowKudos	\$6,000

	Total Annual Costs	\$26,500
4.	Marketing of Journal Subscriptions	\$10,000
3.	Promotion of Journal Content	\$3,000

#### 4. Additional One-Time Costs to Develop Systems

Re	commendations	One-Time Costs (Starting in 2016)
1.	Configuration of ScholarOne to support new editorial board model	\$2,500
2.	Online subscription order processing	(Staff costs for project)
3.	GrowKudos Silverchair implementation	\$7,500
	Total One-Time Systems Costs	\$10,000

In summary, the new editorial board model that is recommended would cost 30,000 more than is currently allocated to editorial oversight and peer-review for the ASHA Journals (200,000 - 170,000 = 30,000).

The support needed to launch the new model includes a one-time cost for an in-person meeting of the editors and editors-in-chief and other Journals Board members, which is estimated to be \$80,000.

The annual cost of the in-person meeting of the Journals Board would be essentially the same, as there are the same number of attendees (assuming the Vice President for Science and Research is included in the count).

In 2016, an additional \$52,500 will be needed to develop and make adjustments to the systems that are needed to facilitate the recommended changes with peer-review, author support/engagement, knowledge translation, and journal promotion/subscription marketing. In the future, the additional annual costs for use of these new systems and approaches will total \$42,500.

Thus, on an annual basis, the recommended changes will cost approximately \$72,500 more than baseline annual operating cost for the ASHA Journals program for the past decade. The need for these changes and the nature of the recommended enhancements are detailed in the report.

## **OVERVIEW**

Recognizing that significant growth and change in scholarly publishing was underway, and monitoring ongoing trends in the scientific growth of the discipline and clinical practice research needs of the professions, the American Speech-Language-Hearing Association (ASHA) sought to gain greater strategic direction for its journals program.

In 2014, the Ad Hoc Committee on Strategic Planning for the Journals Program was proposed and approved (Resolution BOD 5-2014). Constituted in May 2014, this committee began to formulate the strategic recommendations contained in this document. Members of the committee were the following:

- Raymond D. Kent, PhD (Chair)
- Edward Conture, PhD, CCC-SLP
- Larry Humes, PhD, CCC-A
- Marie Ireland, MEd, CCC-SLP
- Swathi Kiran, PhD, CCC-SLP
- Sonja Pruitt-Lord, PhD, CCC-SLP
- Mary Ann Romski, PhD, CCC-SLP
- Anne Smith, PhD
- Mike Cannon, MA (Ex Officio, Director of Serial Publications and Editorial Services)
- Howard Goldstein, PhD, CCC-SLP (Vice President for Science and Research, BOD Liaison)
- Margaret Rogers, PhD, CCC-SLP (Chief Staff Officer for Science and Research)

The committee was charged with reviewing the scope and structure of ASHA's current Journals program and the larger landscape of scientific, technical, and medical (STM) journals publication in order to deliver recommendations to the ASHA Board of Directors by the end of 2015. Specifically, the committee was charged with:

- Recommending organizational structure(s) that would facilitate continuous improvement in the
  journals program in terms of quality, scope, and efficiency;
- Recommending organizational structure(s) that would facilitate timely and effective editorial
  and peer review of journal articles and that would enhance creative efforts to shape journal
  content to meet the changing needs of the discipline;
- Recommending avenues for enhancing dissemination efforts and use of published research for professional development, knowledge translation, and implementation;
- Developing a strategic plan for advancing the ASHA journals program.

The work plan for executing this charge included monthly conference calls and two in-person meetings at the ASHA National Office.

To inform the overall review of the condition of the ASHA Journals program, a survey was fielded in April of 2014. The survey was sent to the 12,000+ individuals registered in the program's online peer-review system, and 1,295 replied, for an 11.2% response rate.

Self-identifying as current or former authors, peer reviewers, editors, and associate editors, these individuals provided detailed and extensive feedback on topics ranging from the peer-review experience to the utility of authorship tools and resources. The summary report for the survey is provided in Appendix A, and key points are referenced throughout the recommendations contained in this strategic plan.

Also at the committee's disposal were extensive data on the program itself—reports covering subscriptions, production/dissemination, usage, and submission and peer review. These were consolidated and made available in a collection of materials pertaining to the business of the program, the scholarly publishing industry, and ASHA's market segment.

In addition, a number of industry organizations generate standards and materials that help the diverse spectrum of scholarly publishers to assess and improve their business operations and planning. The most relevant to the STM space of the scholarly publishing industry are listed below:

- Association of Learned and Professional Society Publishers (ALPSP)
- <u>Committee on Publication Ethics</u> (COPE)
- Council of Science Editors (CSE)
- <u>International Committee of Medical Journal Editors</u> (ICMJE)
- International Association of Scientific, Technical & Medical Publishers (STM)
- Open Access Scholarly Publishers Association (OASPA)
- Society for Scholarly Publishing (SSP)
- World Association of Medical Editors (WAME)

A variety of resources from these organizations were consulted in development of this strategic plan and are referenced accordingly throughout.

#### FACTORS DRIVING THE NEED FOR CHANGE

Based on the survey of nearly 1,300 subject matter experts (see Appendix A) and on the committee members' experiences and analysis of the survey findings, the following issues affecting the long-term viability of the Journals program were identified:

- Lengthy review times, excessive publication lags, and overly cumbersome review process, inconsistent with author expectations and experiences with other publishers;
- Negative tone of reviews, and perceived bias toward certain authors, theories, and schools of thought;
- Excessive workload on editors, associate editors, and reviewers—resulting in greater difficulty recruiting them in a time of increasing demands and competition;

- Shortage of applied clinical research that could inform evidence-based practice and implementation science;
- Lack of clarity on clinical implications of articles;
- Insufficient numbers of systematic reviews, tutorials, and groups of articles conducive to satisfying educational and knowledge translation needs;
- Risk of diminishing relevance of the ASHA journals among an expanding cohort of journals in Communication Sciences and Disorders and related disciplines;
- Need to keep pace with industry standards that authors and users have come to expect;
- Need to increase levels of promotion of journals and individual articles to advance knowledge translation;
- Need to increase international awareness of our journals (increase subscription base and inclusion of authors and editors from outside the United States);
- Lack of scalability of production resources, which increases delays and undermines the ability to deliver on expectations when there are surges of content;
- Need to shift focus to usage and article-level impact for relevancy to libraries and authors;
- Need to tap opportunities for content enrichment in support of greater knowledge translation.

#### ASHA JOURNALS PROGRAM COMPOSITION AND OUTPUT

In 2014, the ASHA Journals program processed 760 manuscript submissions across the following titles:

American Journal of Audiology (AJA)

A quarterly journal of clinical practice; published since 1991

American Journal of Speech-Language Pathology (AJSLP)

A quarterly journal of clinical practice; published since 1991

Journal of Speech, Language, and Hearing Research (JSLHR)

- Bimonthly issues of basic and applied research in three core areas; published since 1936 Language, Speech, and Hearing Services in Schools (LSHSS)
  - A quarterly journal of clinical practice in the school setting published since 1970

With an overall rate of acceptance for publication at approximately 50%, the program published nearly 4,000 pages of research in 2014, as well as more than 100 pieces of supplemental material in the form of multimedia files, data, and expanded text resources, all of which requires peer review.

Through mid-September of 2015, the program processed 544 submissions and is on track to reach or surpass last year's totals, consistent with the long-term trends shown in Figures 1–3.

Figure 1. Annual number of manuscript submissions, 2010–2015 (2015 data reflect actual amounts for January through September 11, plus a projected number of submissions for the remainder of the year).

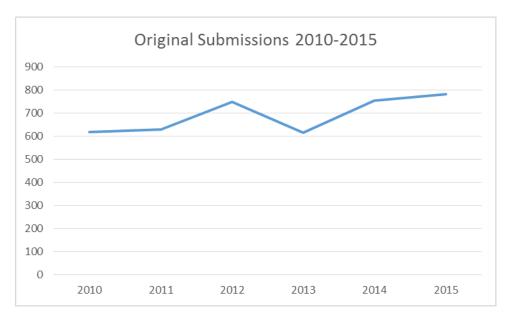


Figure 2. Growth in number of pages of published research across the four journals, 2010–2015 (2015 data reflect actual amounts for January through August issues plus a projected number of pages for the remainder of the year).

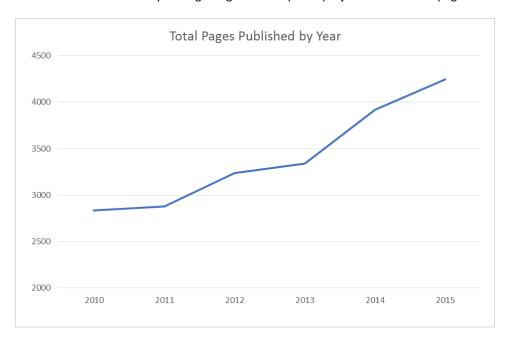
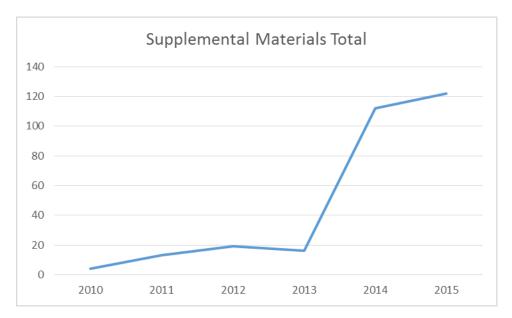


Figure 3. Growth in publication of supplemental materials across the four journals, 2010–2015 (2015 data reflect actual amounts for January through August issues plus a projected number of items for the remainder of the year).



Supplemental materials are items accompanying the research article that help convey added detail about methodology or the issues being addressed. They can be of virtually any file format, but usually are in the form of videos, audio files, or expanded tables or data sets. All supplemental materials published in the ASHA Journals are peer-reviewed and thus an increase in the submission of supplemental materials adds stress to the limited capacity for peer-review in communication sciences and disorders (CSD). Nonetheless, inclusion of supplemental materials is expanding the uses and use of journal articles.

All of the journals are continuously published online and available as a benefit for all ASHA members and associates in good standing, as well as for all NSSLHA members. They are indexed in PubMed and many other venues and are ranked in the top or middle tiers in terms of numbers of citations and impact in their respective categories. Online publication is via the ASHAWire platform, which was launched in January of 2014.

The ASHAWire platform is a state-of-the-art publishing system connecting the journals, all of the Special Interest Group (SIG) *Perspectives, The ASHA Leader*, and the Clinical Research Education (CREd) Library. Relying on a robust semantic taxonomy developed for the ASHA publications and the subject areas represented in them, the platform features 40 topic collections that are dynamically updated as applicable with each article published. The collections serve up related content from across all of the publications on the ASHAWire platform. The platform supports embedded video, slide presentations, and supplemental materials—elements being published in increasing numbers each month.

On an annual basis, there are approximately 2 million downloads of articles across the ASHA journal titles. In addition to being engaged with by the more than 220,000 regular users who are e-mail alert

subscribers, the journals are available at more than 1,200 subscribing institutions, both in the United States and internationally.

#### PROGRAM DIRECTION AND OVERSIGHT

The ASHA Journals program is guided by the ASHA Publications Board, which is currently constituted as follows:

- The Publications Board chair
- Seven ex officio voting members (six being editors of the journals or journal sections and one being the editor of NSSLHA's journal Contemporary Issues in Communication Science and Disorders)
- Five noneditor voting members who are appointed by the Board of Directors based on nominations from the chair, the director of serial publications and editorial services, the chief staff officer for science and research, and the vice president for science and research; these members serve 3-year terms and should have expertise and experience in research and scholarly publishing.

The vice president for science and research liaises with the Publications Board. The chair of the Publications Board is a member of the Science Advisory Board.

Operationally, the program is in the Research, Academic Affairs, and Publications cluster, overseen by the chief staff officer for science and research, who also serves as a staff consultant to the Publications Board. The ex officio to the board is designated by the chief executive officer and has historically been the director of serial publications and editorial services. Current direct staffing includes two production editors, a peer-review administrator, most of a subscriptions and permissions manager's time, and part of two administrative assistants' time. In addition, a number of contractors and vendors are involved at various stages of the work.

#### ROLE OF THE JOURNALS PROGRAM WITHIN ASHA

The ASHA Journals program entails publication of highly specialized and technical multidisciplinary output that is consumed worldwide. Access to the content produced is a member or affiliate benefit, but it is produced according to the larger needs of the science so that it can most effectively be applied at multiple levels by a broad array of constituencies.

With the built-in core user base (or potential user base) of ASHA's membership, publications in general are key drivers of member engagement. Scholarly journals published by a membership and credentialing organization such as ASHA can also play a significant educational role in the discipline, both in higher education and continuing education.

As STM publishing continues to evolve, so must the ASHA journals continue to grow and change to meet the research communication and knowledge translation needs of the discipline. It is clear that the

program of research communication must be strategically interconnected with ASHA's long-term plans for growth and transformation.

#### **CONTENT STREAMS**

As a content source, the journals represent a significant stream of authoritative information that can be, and is, piped in to other venues (such as Research Briefs in *The ASHA Leader* and articles associated with author interviews from the CREd Library). Particularly now that the overall stream is segmented into topics on the ASHAWire platform, more precise linkages and intelligent connections can be made in a host of areas. The journals already serve as one of the top sources of traffic to the <a href="www.asha.org">www.asha.org</a> website, but this conduit can be grown and enriched further to advance knowledge translation.

#### PROFESSIONAL DEVELOPMENT

The journals have historically been a key source of material for ASHA Professional Development, and opportunities exist to expand that role from where it currently stands. At present, the journals represent just 5% of the ASHA Professional Development courses offered, but publications-based professional development (represented largely by Special Interest Group *Perspectives*) is roughly 55% of the total number of CE products offered.

The nature of how the journals can figure into various learning activities has already begun to change—with articles now becoming more multimedia-rich learning tools. With a greater emphasis on enrichment of articles for knowledge translation, and with the journals and *Perspectives* content already fully interconnected and semantically organized on the ASHAWire platform, opportunities exist to capitalize in greater measure on the natural connections between these streams.

#### VALUE FOR MEMBERS AND AFFILIATES

The widespread visibility and utility of the journals is one of the cornerstones of the perceived value of ASHA. ASHA members have ranked the journals as a program area that is important or very important to their professional role (see, e.g., ASHA, 2009). As far back as the 1997 ASHA Omnibus Survey, from a list of 21 items that enhance ability to practice one's profession, the ASHA journals was the one most frequently chosen by speech-language pathologists (61%), and was the second most frequently chosen by audiologists (45%). Advocacy with federal agencies and the Congress was the most frequently chosen item by audiologists (51%). (ASHA, 1997, p. 1).

This enduring trend has been reflected as well in ASHA's 2015 International Affiliates Survey, in which current and former affiliates rated the journals as the most valued ASHA program or benefit. This is perhaps to be expected, as the journals program by its very nature represents a core form of international visibility and engagement with the Association.

Authors come from all over the globe (see Figure 4), as do associate editors and reviewers. The connection to ASHA via publication of research is an important opportunity for building even greater connections and to raise awareness of the research and advances in CSD that are happening worldwide.

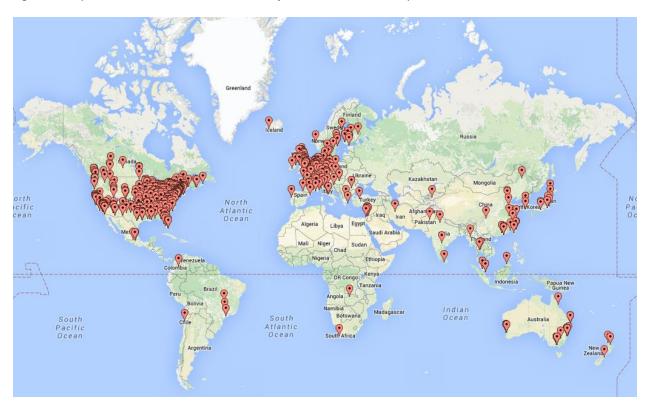


Figure 4. Map of affiliation locations for all ASHA journals authors, 2002–present.

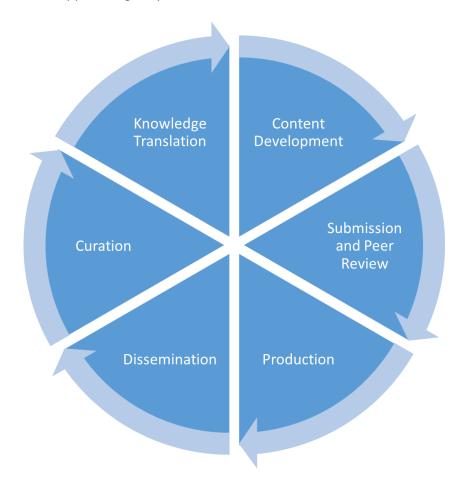
The roles played by the journals program within ASHA are already significant, but the recent changes in the manner in which they are published online represent a deep well of untapped opportunities. Those opportunities will continue to be realized as the current roadmap for the program unfolds, and especially through the strategies described within this report.

#### THE SCHOLARLY PUBLISHING LIFECYCLE

In addition to understanding the role of the journals program within ASHA, it is important to understand the cyclical manner in which scholarly publishing operates. Understanding the key principles of the research communication mechanism is important for assessing how to tune this instrument for ASHA's purposes in advancing CSD research and supporting the translation of research to professional practice.

The ongoing, archival nature of scholarly publishing has promoted the development, compilation, and translation of knowledge in a self-perpetuating, cyclical fashion, as shown in Figure 5. This cyclical publishing process has been in place in the industry for now more than 350 years.

Figure 5. The scholarly publishing lifecycle.



The recommendations contained in this report are essential to shore up this lifecycle so that it can continue to operate, and at a faster pace, for many years to come even in the face of the continued growth in content that is anticipated. For background, a sample of the essential activities and subdomains by lifecycle phase are listed below.

#### CONTENT DEVELOPMENT

Content development is ideally a two-way process in which authors write articles and seek a publication venue, and in which authors are sought to generate content that a publisher needs for the strategic purposes of their publication or professional society. In our current approach, the editors of the journals are nearly fully consumed with the day-to-day work of managing peer review, so less effort can be given to content development. Because most of the editors' time is spent processing manuscripts and reviews, they find it difficult to create forums, supplements, and innovative features in journal content.

In the piloted Editorial Board model in use for *AJA* over the past 4 years, there has been significant growth in the number of forums and supplements produced. For example, in 2010, there was only one article published in *AJA* in the Supplements and Forums category, whereas in 2014, there were 34 articles accepted for publication in *AJA* in the Supplements and Forums category. Supplements and

forums greatly aid in discovery, use, and promotion of research. Forums and supplements are consistently among the most downloaded content published in the ASHA journals. They are essential to attracting focused attention on complex questions and issues, and they are a ready source of professional development products.

#### SUBMISSION AND PEER REVIEW

Manuscript submission is the first main touchpoint with authors. In the early part of the 2000s, submission typically involved mailing a manuscript and cover letter to the publisher. Now, submission is nearly universally an activity managed with online systems for intake and routing of manuscripts. The submission process is also the point at which most data about the manuscript enters the overall production process, so it is essential that the submission process be seamless and effective for both the authors and the publisher.

Upon submission, manuscripts are routed through the peer review process. For the program as a whole, peer review involves extensive work by hundreds of volunteers across a wide range of subject areas. Many of those involved work in related disciplines and at institutions all over the world. Operationally speaking, ASHA's program uses Aegis Peer Review Management to support that day-to-day work, and a peer-review administrator in-house is tasked with answering nonroutine questions from editors and authors. In addition, this administrator handles special situations in production and is tasked with development and management of resources related to submission and peer review.

#### **PRODUCTION**

As a continuous publisher, the ASHA Journals program processes accepted manuscripts through the production systems in an iterative fashion, publishing articles as they are ready and then producing online issues for archival and indexing purposes and print on demand issues for select subscribers. This work is handled by two production editors who oversee copyediting that is fully outsourced to a vendor. Proofreading is largely outsourced to individual freelancers, and author changes and later revisions are done in-house.

#### DISSEMINATION

Until the early 2000s, *dissemination* largely meant completion of the production stage. The final step in producing an issue was the approval of the content. The printer then took it from there, mailing and distributing the copies to subscribers. With the move to online journals, dissemination initially took the form of uploading PDFs of articles hosted in online issues, followed by the more extensive tasks of producing full-text XML/HTML versions.

Dissemination now means pushing out single articles as soon as they are finalized, as well as releasing issues (online and print on demand). Multiple associated dissemination events now occur—including new content alerts, issue-based electronic tables of contents, and social media releases for each article

or bundle of articles. Continuing education is another critical means of dissemination for the purposes of knowledge translation.

#### **CURATION**

In the print paradigm, curation was an activity—largely external to the publisher—that involved some manual moving of issues to display shelves in the library, either based on newness or associated with some larger effort to highlight issues in support of a campaign or theme.

Curation is now being done more actively by publishers, using an array of approaches and tools. The ASHAWire platform actively and automatically curates articles into topic collections by journal and across publications using the semantic taxonomy developed for the platform. Curation can also be done at the article element level. Collections of related images or of audio and video files or of data sets are all possible and are now becoming commonplace in the industry. In addition, curation via social media offers virtually endless possibilities for offering new avenues of discovery.

#### KNOWLEDGE TRANSLATION

Knowledge translation is that phase in which consumption of research leads to some gain in awareness or ability to apply the newfound knowledge contained in the research being reported. That can be facilitated through the enrichment of content—attaching elements such as summaries and links to additional contextual material. It can also involve structured learning activities, such as professional development exercises or in-person learning events.

Knowledge translation also occurs naturally as part of subsequent scientific inquiry. Literature reviews within research articles distill key concepts and frame research issues, and specialized manuscript types such as systematic reviews and meta-analyses provide a deeper form of integration of knowledge for the purposes of its translation.

In addition, external to the publication of research articles, knowledge translation can occur through many varied communication vehicles, with the common result being to inform, facilitate application of the information, and spur additional content development, continuing the scholarly publishing lifecycle shown in Figure 5.

At present, the ASHA Journals program is taking advantage of the ASHAWire platform to enhance knowledge translation by including embedded videos and slide presentations with articles, incorporating author interview videos in alerts and linking the videos to the articles, and configuring the platform to accept a range of forms of content enrichment now in the planning and development stages. The impact of embedding author interview videos in e-mailed tables of contents has already led to significant gains in visibility and use of the journals.

#### **INDUSTRY BACKGROUND**

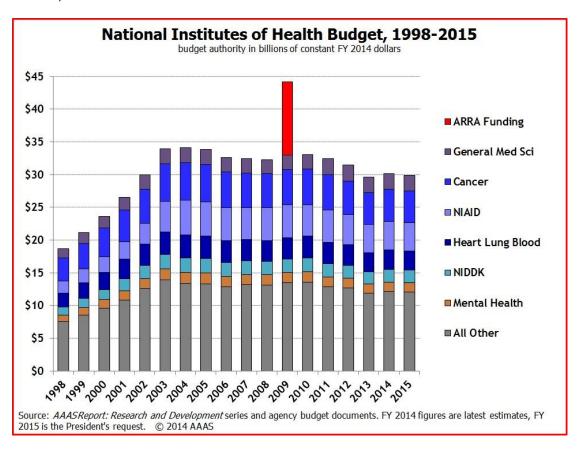
The STM publishing space in which the ASHA Journals program operates is a growing and rapidly changing subset of a \$25 billion industry that is well into a radical evolution. The STM space grew in large measure with the rise of the sciences and social sciences in the 20<sup>th</sup> century, spurred on especially in the 1980s and 1990s by significant growth associated with biomedical and pharmacological research. Although research funding in the United States has plateaued in recent years (see Figures 6 and 7), expansion of biomedical R&D spending worldwide, particularly in Asia, has contributed to growth in the breadth, if not the overall size, of the STM publishing industry (see, e.g., http://www.fic.nih.gov/News/GlobalHealthMatters/january-february-2014/Pages/spending-investment-

biomedical-research-development.aspx).

NIH Budget by Funding Mechanism, 1998-2015 (budget authority in billions of constant FY 2014 dollars) \$40 ■ All Other \$35 \$30 ■ Other Research \$25 ■ Research Centers \$20 R&D Contracts \$15 \$10 ■ Intramural Research \$5 ■ Res. Project Grants 2000 2002 2004 2006 2008 2010 2012 Source: AAAS Report: Research and Development series and agency budget documents. FY 2014 figures are latest estimates, FY 2015 is the President's request. © 2014 AAAS

Figure 6. NIH budget by funding mechanism, 1998–2015.

Figure 7. NIH budget, 1998–2015 (ARRA = American Recovery and Reinvestment Act of 2009; NIAID = National Institute of Allergy and Infectious Diseases; NIDDK = National Institute of Diabetes and Digestive and Kidney Diseases).



Not surprising, the long-term growth in research funding has to some extent matched the increased need for research—from both the public and media's interest in the latest information to the increased demand for evidence-based practice and accountability being required by legislative, regulatory, and health insurance systems. The public health sector has experienced this need acutely in the form of mandates for increased evidence justifying reimbursement for a wide range of clinical practices and treatments. Similarly, transparency, fairness, and accountability in education have played a key role in the expansion of research in this space.

At the same time, fundamental changes have occurred in STM publishing, especially in areas of access, online discoverability, peer-review approaches, and the manner in which research impact is measured and scholarly contributions tracked. For further background, these and other trends are addressed in Appendix B.

Within STM publishing there has been tremendous expansion of the number of titles and articles being published worldwide. There are now approximately 2.5 million peer-reviewed English-language articles published per year across more than 28,000 journals. As shown in Appendix C, there are several hundred journals in which the surveyed ASHA Journals authors, editors, and reviewers publish.

Authors in the ASHA journals come from a range of disciplines beyond CSD, which is evident particularly from the list of journals in which they typically publish. However, it is worth noting that CSD now receives greater recognition than ever as a segment of STM publishing in its own right. In 2011, *Audiology and Speech-Language Pathology* was added as a subject category in the index from which Impact Factors are reported. The ASHA journals are indexed according to that and other categories, and the rankings of the ASHA journals among others in their categories are shown in Appendix C (Tables C2–C6).

## **ASHA'S ENVISIONED FUTURE**

ASHA's Envisioned Future 2025 played a central role in guiding the development of this strategic plan. The following excerpt articulates what ASHA aspires to achieve in a decade:

ASHA—the professional, scientific, and credentialing association for speech-language pathologists, audiologists, and speech, language, and hearing scientists—leads the efforts in advancing, sustaining, and promoting the discipline of communication sciences and disorders, related functions and methods of communication and advocating for those they serve. When policy makers, payers, federal and state agency personnel, media, other professionals, and consumers need guidance, knowledge, and advice on standards, credentials, scope of practice, research, legislation, regulations, and clinical information related to communication sciences and disorders, they communicate with ASHA because of our contributions to advancing the professions, commitment to diversity, resources, advocacy, and collaboration with related professional entities.

The overall statement of ASHA's position in 2025 reflects a number of distinct aspects of the Association's intended status, but chief among them in relation to journals are the following:

- Through a long-standing commitment to the integral relationship between the professions,
   ASHA remains the association of choice for professionals in human communication sciences and disorders.
- Practice is evidence based and the contribution of practice knowledge to the evidence base is
  well recognized. As a result, there is clearly evident improvement in the functioning,
  participation, and health, educational, vocational, and recreational outcomes of persons across
  the lifespan with communication disorders.

The following eight transformational outcomes, in priority rank, have been identified by the ASHA Board of Directors. Each includes an area of excellence, akin to a strategic theme, in parentheses:

- 1. Enhanced data and outcomes to improve practice and drive value (Discipline)
- 2. Support interprofessional education and interprofessional practice (Professions)
- 3. Enhanced the generation, publication, knowledge translation, and implementation of clinical research (Discipline)
- 4. Enhanced service delivery across the continuum of care (Professions)
- 5. Greater influence on the value of speech-language pathology and audiology services (Advocacy)
- 6. More diverse membership (Membership)
- 7. Enhanced international engagement (Discipline)
- 8. Increased cultural competence (Professions)

#### ESTABLISHMENT OF A STRATEGIC OBJECTIVE FOR THE JOURNALS PROGRAM

Because an association's scholarly publishing program is ultimately a publishing business inside a membership organization, it has to operate in such a way that the strategic goals of the publishing business are in alignment with the strategic objectives of the Association.

The journals strategic planning is directly aligned to support the following strategic objectives:

- Strategic Objective 3: Enhance the generation, publication, knowledge translation, and implementation of clinical research; and
- Strategic Objective 7: Enhance international engagement.

#### VISION, MISSION, AND CORE VALUES

Keeping in mind the nature of scholarly publishing and the opportunities seen in just the past 20 years with regard to publication, dissemination, and knowledge translation, and acknowledging the unique role played by journals in a scientific and professional association, the Committee proposes a mission for the program as a whole that promotes strengthening of the scholarly publishing capability. In addition, the mission should encourage scalability of the enterprise in keeping with the needs associated with ASHA's Envisioned Future.

In light of the above, the Committee recommends the following vision, mission, and core values for the program:

#### Vision

The ASHA journals are the most comprehensive, relevant, and respected sources for research content in communication sciences and disorders.

#### Mission

To provide the research, resources, and data-based tools needed for ASHA members, related professionals, and researchers in all facets of the communication sciences and disorders discipline to make the greatest impact possible with their work by

- Supporting the growth of the scientific knowledgebase and understanding of the basic processes and mechanisms underlying normal communication, balance, and swallowing;
- Advancing evidence-based clinical practice in CSD;
- Ensuring the long-term health of the discipline by promoting scholarship and development of next generations of researchers;
- Publishing and archiving authoritative content that adds significant value to membership or association with ASHA.

#### **Core Values**

- Excellent standards and high-quality scholarly products
- High-impact publications that shape the knowledge base and benefit those with communication disorders
- Accessibility of publications to all interested parties—members, scholars, those with communication disorders, governmental and public administrators, and the general public

Because the ASHA Journals program operates within the larger publications program, the mission of that program is included here for reference.

#### **Mission of ASHA Publications Program**

Ensuring the continuing excellence of content development, dissemination, and curation for the American Speech-Language-Hearing Association.

#### STRATEGIC OUTCOMES

In postulating what the future would look like for the ASHA Journals program, the Committee advised that the following strategic outcomes would be realized:

- The knowledge base represented by the journals is comprehensive, highly accessible, highly relevant, and highly used.
- ASHA is recognized as the preeminent source for compiled knowledge in communication sciences and disorders.
- ASHA has highly favorable publishing relationships with key organizations and a wide range of researchers, including international scholars.
- Researchers participate extensively in the publishing enterprise because it is mutually beneficial.
- Published evidence and translation of that evidence is leading to improvements in clinical service delivery and outcomes for those with communication and related disorders.
- Clinical practice research is more prevalent, accessed, and used than it has historically been.

Achieving these outcomes requires optimization of the research communication and knowledge translation mechanisms. Fifteen years ago or 350 years ago, the research communication mechanism was the printed journal and journal article. Now, with technological advances in online publishing, the potential impact of scholarly publications is much broader. Each article published can contain both text and an array of multimedia elements. In addition, each article is now fully interlinked with the library of research that preceded it. Whereas previously journal articles were purpose-built to report methodology and analysis of results, each article is now part of a more accessible, more contextually rich stream of information that has greater potential to support the needs of a broader array of constituents.

As a result, the ASHA Journals program can better serve to maximize the likelihood or extent to which strategic outcomes are realized. Matching what the program needs with the dominant themes of ASHA's

Envisioned Future allows for development of a highly nimble program that benefits ASHA holistically, touching on all aspects of what the Association does and what it provides for members and for development of the CSD discipline.

Given the importance of knowledge translation as one of the top priorities for the Association, and given the natural role of the journals program and the nature of the scholarly publishing lifecycle, the overall strategic objective of the program is as follows: *Maximize the knowledge translation potential of research and research-based content*.

#### STRATEGIC INITIATIVES AND MILESTONES

After careful consideration of the operations of the ASHA Journals program and the needs of the Association, the discipline, and the professions, the strategic planning committee concludes that achievement of the aforementioned strategic objective will require focused efforts in the form of three initiatives:

- 1. Ensure the Sustainability and Effectiveness of Editorial Oversight and Peer Review
- 2. Increase Strategic Content Development
- 3. Grow the Visibility, Impact, and Use of the Journals

These initiatives together comprise 10 milestones. These milestones are listed below and their associated deliverables and process recommendations are detailed in the subsequent sections of this report.

Ensure the Sustainability and Effectiveness of Editorial Oversight and Peer Review

- Transition to an Editorial Board Model
- Create a Journals Board
- Improve the Quality and Culture of Peer Review

Increase Strategic Content Development

- Refine the Content Portfolio
- Facilitate Content Recruitment by Editors-in-Chief and Editors
- Increase Author Engagement

Grow the Visibility, Impact, and Use of the Journals

- Develop a Rapid Publication Model
- Expand Content Curation
- Broaden the Subscription Base and Product Offerings
- Expand Knowledge Translation Efforts

## INITITATIVE 1: ENSURE THE SUSTAINABILITY AND EFFECTIVENESS OF EDITORIAL OVERSIGHT AND PEER REVIEW

Effective editorial oversight and peer review constitute the foundation of ASHA's scientific publishing program. However, as experienced by the Publications Board in recent years, and as detailed in the Journals Survey results (see Appendix A), that foundation is in need of repair and redesign to capitalize on current capabilities and opportunities.

The growing demands of institutions on their faculty and the increasing need for recognition of all forms of scholarly contributions have made it increasingly difficult to attract editors, associate editors, and reviewers. There is simply more competition for their time across a wider spectrum of publications. As journal submissions increase in such an environment, the additional workload naturally exacerbates those recruitment difficulties.

At the same time, the nature of peer review has changed quite significantly. Whereas a "gatekeeper" model once prevailed in the print era, reductions in the constraints on the amount that can be published have ushered in many changes in the nature of what is published in journals. Competition, the immediacy of online access, article-level usage metrics, postpublication commentary/review, and a host of other changes have elevated the importance (to both authors and reviewers) of speed and consistency of peer review and of evaluation being on "soundness" rather than significance, which is highly subjective and sometimes shortsighted.

With the backdrop of prevailing trends in scholarly publishing, the experiences that editors, reviewers, and authors were having with other publications outside of ASHA made it clear that the ASHA Journals program's approach was more the rarity than the norm. Concerns expressed in feedback captured by the Journals Survey echoed many of the same issues and difficulties that have been raised by members of the Publications Board:

- Excessive editor, associate editor, and ad hoc reviewer workload
- Inconsistency in editorial approach and high variation in amount of content ready for publication
- Unacceptably lengthy and complex peer review
- Lack of recognition for reviewers and difficulty recruiting them (further compounding editorial workload and review time)
- A peer-review culture discouraging submission, particularly of clinical practice research

To address these concerns, the Committee has identified the following milestones to be reached in ensuring the sustainability and effectiveness of editorial oversight and peer review for the ASHA Journals program:

- Transition to an Editorial Board Model
- Create a Journals Board
- Improve the Quality and Culture of Peer Review

#### MILESTONE 1.1: TRANSITION TO AN EDITORIAL BOARD MODEL

One central and critical issue that was addressed by the Committee was the editorial and peer-review structure. The Committee studied and compared the program's current model with other models, and based on this analysis, which revealed that most peer-reviewed journals use more efficient structures, the Committee recommends changes to the editorial approach for all of the ASHA journals. These changes are summarized below. This is a critical structural evolution that the Committee believes (and the evidence suggests) will greatly improve the experience of authors, reviewers, and editors. Specifically, the aim is to increase the program's ability to enlist reviewers to volunteer to review manuscripts, to greatly improve the timeliness and consistency of the review process, and to change the review "culture" associated with the ASHA journals so that the reviews and review response process are more targeted and efficient on both sides of the submission process.

By instituting a different editorial structure, including editors-in-chief and a new layer of editors (similar to the associate editor layer currently in place, but with the empowerment to make final editorial decisions on manuscripts), there will be more reasonable workloads at all levels.

An examination of the stated editorial practices of 21 other journals in the *Audiology and Speech-Language Pathology* Impact Factor subject category (e.g., *Ear & Hearing, Journal of Fluency Disorders*) showed that all have an editorial board model in place. Only the ASHA journals operate without such a model. The term *editorial board* is the conventional nomenclature for those individuals involved in the operational end of the peer review process and is meant to reflect the organizational structure for their activities and provide recognition for their contributions. Broader, program-level oversight and governance are typically handled by a separate board (see Milestone 1.2) tasked with those functions.

#### SUMMARY OF NEW EDITORIAL OVERSIGHT STRUCTURE

Editor-in-Chief, one for each journal (or journal section in the case of JSLHR)

Editors, one for each major area of the journal, as appropriate

**Editorial Board, composed of frequent reviewers** 

With the *Editor-in-Chief* model, the goal is to empower highly experienced scientists who have a larger vision for the field to guide the journal, to define and adjust its evolving mission, and to understand and adapt to the changing needs of the readership. The editors-in-chief will also be in the optimal position to have broad oversight of the review process. *Editors* will be empowered to make final editorial decisions, and the levels and complexity of feedback to authors will be reduced. Achieving this goal also will be aided by the adoption and use of an editorial review model and structured reviews, which will include clearly directed (specific questions are posed and brevity is encouraged) reviewer feedback forms that indicate to the reviewer the exact nature of the feedback being sought. Finally by being members of an *Editorial Board*, frequent reviewers will receive recognition for their important contributions.

Below are additional details regarding editorial board roles and responsibilities, including the numbers of individuals anticipated to be needed at each level and the corresponding budget.

#### EDITOR-IN-CHIEF (EIC)

#### **Qualifications:**

As noted in the *White Paper on Integrity in Scientific Journal Publications* (Council of Science Editors [CSE], 2012), the EIC should "possess a general knowledge of the fields covered in the journal and be skilled in the arts of writing, editing, critical assessment, negotiation, and diplomacy" (p. 20). Individuals appointed to this role are expected to have substantial experience in reviewing and editing, in addition to a strong reputation for research. As recommended in the CSE White Paper, the EIC will have editorial freedom, defined as having "complete authority for determining the editorial content within the defined scope of the journal" (p. 20). EICs would be selected and appointed by the Journals Board (see Milestone 1.2), which would be empowered to remove or replace them as needed.

**Number**: 6 people (one each for *AJA*, *AJSLP*, *JSLHR*-Hearing, *JSLHR*-Language, *JSLHR*-Speech, and *LSHSS*) **ASHA Membership Status**: ASHA membership required (ASHA certification is not required.)

**Term**: 3-year term (all 6 EIC terms are staggered, so term lengths would be adjusted upon initial appointments to create staggered rotations)

**Budget**: \$5,000 per EIC per year, to support content recruitment and development efforts (e.g., via conferences)

**Peer-Review Workload**: Oversees journal, assigns manuscripts to editors, and handles disputes and unusual situations

#### **Duties:**

- Ensures that the journal's editors and editorial board receive the necessary training to perform their functions
- Assigns submitted manuscripts to editors (but no day-to-day involvement in peer review)
- Monitors performance of editors and editorial board members (timeliness, calibration)
- Handles disputes and ethical issues
- Advises on policy considerations (including methods for reconsideration of rejected manuscripts, conflict of interest and disclosure, allegations of scientific misbehavior and misconduct)
- Recruits content (forums, supplements, individual articles)
- Sets strategic priorities for their journal
- Consults on knowledge translation/enrichment (e.g., identification of articles for broader coverage/promotion)
- Writes editorials (minimum of 1 per year; maximum of 1 per issue) that would be reviewed by other EICs and ASHA science and research staff for continued alignment with ASHA's mission, philosophy, priorities, and policies

• Serves on the Journals Board and interacts with the other five EICs on matters of mutual interest to promote the overall quality of the journals program

#### **EDITOR**

#### **Qualifications:**

Editors should have demonstrated competence and established reputation in the research specialty (or specialties) to which they are assigned. In addition, editors should have substantial experience in reviewing manuscripts.

**Number**: ~40 (6 *LSHSS*; 4 *JSLHR-H*; 7 *JSLHR-S*; 9 *JSLHR-L*; 10 *AJSLP*; 4 *AJA*; distribution is based on historical numbers of submissions, not acceptances, to the journals)

ASHA Membership Status: ASHA membership or certification not required

**Term**: 3-year term (terms are to be staggered, so term lengths would be adjusted upon initial appointments to create staggered rotations)

**Budget**: \$2,500 per editor per year to support content recruitment and development efforts (e.g., via conferences)

Peer-Review Workload: Renders decisions on ~15–18 submissions per year

- Assigns manuscripts to EBMs for review
- Monitors the peer-review process to ensure fairness, timeliness, thoroughness, and civility
- Can recruit content (forums, supplements, individual articles) in consultation with EIC
- Consults on knowledge translation/enrichment (e.g., identification of articles for broader coverage/promotion)
- Staggered terms, independent of the EIC's term, such that each new EIC fills only a subset of
  editor positions while other editors in the same journal stay on to promote consistency
- Outgoing editor stops processing new manuscripts November 1 but continues processing all manuscripts that started in their term. New editor starts processing manuscripts November 1.

#### EDITORIAL BOARD MEMBER (EBM)

#### **Qualifications:**

EBMs should possess a high level of expertise in their specialty (or specialties), have experience with reviewing manuscripts, and a commitment to participating in the review process of the journal. These individuals will be named on the journal masthead.

**Number**: ~175 (distribution to be based on submission rates, with ~24 *LSHSS*; 19 *JSLHR-H*; 32 *JSLHR-S*; 41 *JSLHR-L*; 42 *AJSLP*; 17 *AJA*; note: number of EBM members and external reviewers needed per submission may vary)

**ASHA Membership Status**: ASHA member, nonmember, or international affiliate (ASHA membership or certification is not required.)

**Budget**: \$400 per EBM per year for reviewing the agreed number of manuscripts in a prompt manner; this is consistent with a growing trend of journals employing reviewers as staff and/or honoring

recommendations of paid, third-party peer-review services.

**Term**: no fixed term—annual agreement

**Peer-Review Workload**: Submits review comments for ~8–10 submissions per year (If fewer than 8 invitations are received, the EBM still receives \$400. Invitations received beyond 8 manuscripts may be declined.)

#### GENERAL PEER-REVIEW PROCESS

Regarding manuscript assignment and the peer-review process, the EIC is responsible for assigning each manuscript to an editor, making sure no editors are overburdened. The editor assigns at least two reviewers, sometimes three. These reviewers can be all EBMs or one EBM and one ad hoc reviewer or any combination. The editor is not expected to provide detailed comments. The editor, in a decision letter, should instead help the author identify the most important changes, particularly when EBMs or ad hoc reviewers disagree. An editor would be free to recruit additional reviews, such as for specialized statistics review, as needed. EBM lists would be journal-specific so that a person's first loyalty is to his or her assigned journal.

The Committee affirms that peer review by external reviewers with appropriate expertise is the means to maintain the scientific quality of the journals of the Association. However, as is currently the policy, editors have the prerogative of rejecting manuscripts without external review if the editor believes that the manuscript is outside the scope of the journal, does not meet the journal's editorial standards, or is otherwise deficient in scientific merit to warrant peer review.

A piloted version of a similar editorial board approach has been in use with *AJA* for nearly 4 years. At the time of the model's implementation, the journal was published as a biennial. Because of the 6-month gap between issues, added delays associated with the existing peer review model only compounded the difficulty in attracting submissions from authors.

As shown in Figures 8 and 9, the average time from submission to an acceptance decision in *AJA* has been cut by nearly two-thirds and the number of submissions has more than doubled.

Figure 8. Average number of days from submission to acceptance for publication.

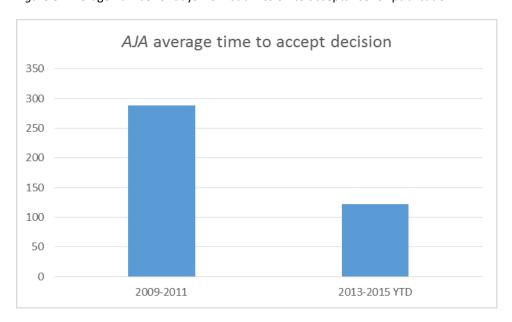
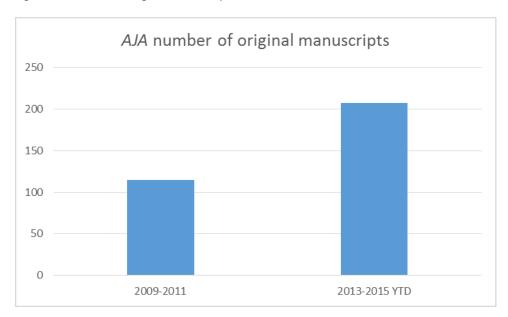


Figure 9. Number of original manuscripts submitted to AJA



Also contributing to the growth of *AJA* was the switch to quarterly publication once the volume of submissions had increased sufficiently to warrant greater frequency. In addition, the first Impact Factor for the journal was reported in 2012 (0.865, ranking *AJA* 18th of 22 journals in the *Audiology and Speech-Language Pathology* category and 32nd of 42 journals in the Otorhinolaryngology category, both respectable rankings for the first year of reporting).

#### RESOURCE REQUIREMENTS

The current budget allowance for ASHA Journals editor support totals \$170,000. Budget spending for the new editorial board model proposed would be \$200,000. The number of people assigned to each role is somewhat flexible, but certainly no fewer than the proposed is manageable given the current number of submissions received per year. Since the volume of journal articles may continue to grow, it is possible that additional editors and reviewers will be needed over time. The Committee agreed that guest editors and ad hoc reviewers are a viable option for managing fluctuations in submitted content beyond what is typical for the near future.

Because the editorial and review funds are of a smaller amount spread among a larger group, it is recommended that they be dispersed as a stipend, as opposed to via reimbursement. The latter would require an inordinate amount of staff time to process because, every year, multiple requests for reimbursement would be submitted by more than 200 volunteers in piecemeal fashion, many of which would require follow-up email, if history is any indication. Further, the level of commitment and responsibility required are so significant that a stipend is warranted. It is recommended that each recipient receive half of the stipend at the beginning of the year and half at the end of the year, assuming all commitments are met in terms of number of reviews and completion of reviews according to timeliness and quality expectations (all of which can be monitored with the ScholarOne system that is used currently to process submissions and reviews).

To ensure calibration among the members of this more expansive board, the Committee recommends a face-to-face meeting in January 2017. This meeting would be attended by the editors, the EICs and other members of the Journals Board, and representatives from the Ad Hoc Committee on Strategic Planning for the Journals. This is a one-time meeting that the Committee deems to be critical to change management with respect to both operational changes and the desired cultural changes in peer review. The meeting would serve to (a) familiarize the editors and EICs with the platforms, procedures, online and staff support available to them and reviewers; (b) demonstrate the mechanisms by which the performance of editors and editorial board members can be monitored; (c) calibrate the editors and EICs concerning the desired review culture, the new template format for review, and the target timelines for the review process; and (d) orient the editors and EICs in how to be proactive and creative in recruiting content and creating research and clinical forums.

The meeting is also an important opportunity to convey elements of the program's and the Association's strategic direction. It will be very important to convey to editors and EICs that they need to take proactive roles in developing content (e.g., forums), attracting authors to submit to the ASHA journals, and to share the urgent need for clinical practice research publications. It will also be important to provide them with up-to-date knowledge concerning the many enhancements that are now possible, including embedded video, the many forms that electronic supplementary materials can take, and the knowledge translation mechanisms that can be integrated into the journal publication (e.g., clinical abstracts, author interviews). With the extent of practical and theoretical changes involved in this transition, buy-in will be greater to the extent to which the larger purpose is realized. Building enthusiasm and creative involvement will not only smooth the transition, but also will inspire

participants to be ambassadors for the program and for ASHA. Many will have strong interdisciplinary connections and some will bring important international perspectives to the table. In all cases, the attendees are people who are experts and influencers. Their ability to articulate the positive changes being made by the ASHA Journals program will be beneficial for future recruitment efforts, both for participants and content.

#### MILESTONE 1.2: CREATE A JOURNALS BOARD

With the editorial board model in place, the Committee expects that the oversight board will have the opportunity to increase its focus on the strategic direction of the program. Consequently, the following changes are recommended regarding the board's name, charge, and composition that will allow it to take full advantage of that opportunity.

#### **BOARD NAME AND CHARGE**

The Committee's first recommendation is that the Publications Board be sunset and a new board established named the *Journals Board* to ensure greater internal and external clarity of its focus. With that change in name would come a refinement of its charge, which is currently as follows:

The Publications Board of the American Speech-Language-Hearing Association (ASHA) shall be charged with (a) planning, coordinating, and monitoring the production of scholarly journals of the Association; and (b) implementing the policies of the Association concerning publications.

With the current name and charge, there is confusion about which publications the Publications Board oversees. Many people external to the program presume that the board's oversight extends to both *The ASHA Leader* and the Special Interest Group *Perspectives*. This is not the case, as indicated in the board's charge above (amended EB 29-97). The Committee, therefore, recommends the following revision:

The Journals Board of the American Speech-Language-Hearing Association (ASHA) shall be charged with (a) approving editors and editorial board members for the ASHA scholarly journals, (b) conducting ongoing strategic planning for the program, and (c) monitoring and ensuring the effective functioning of the editors and editorial board.

#### **BOARD COMPOSITION**

The Committee recommends that the board member structure be changed to reflect the new editorial board model and the need for an increased strategic focus identified in its charge. The Publications Board currently includes the following 14 members:

 1 chair, who serves a 3-year term and who is appointed by the Board of Directors based on nominations from the incumbent chair, the director of serial publications and editorial services, and the vice president for science and research. The chair typically has experience as an editor for the ASHA journals or other journals and has served on the Publications Board.

- 7 ex officio, voting members who are the 6 editors (serving 3-year, staggered terms) of the ASHA journals and the editor of the NSSLHA journal *Contemporary Issues in Communication Science and Disorders (CICSD*).
- 1 member who is the vice president for science and research
- 5 noneditor, voting members who are appointed by the Board of Directors based on nominations from the chair, the director of serial publications and editorial services, and the vice president for science and research. These members serve 3-year staggered terms, should have expertise and experience in research and scholarly publications, and, preferably, have indicated an interest in the appointment through the Committee/Board Pool Form.

The proposed Journals Board would have the following 13 members:

- 6 editors-in-chief (AJA, AJSLP, JSLHR-Speech, JSLHR-Language, JSLHR-Hearing, LSHSS)
- 3 clinical representatives (one each in audiology, SLP health care, SLP schools)
- 1 representative from the standing committee on Clinical Practice Research, Implementation Science, and Evidence-Based Practice (CRISP)
- 1 international member
- 1 specialist in publications, information science, e-learning, or related area (public member)
- 1 chair

The vice president for science and research would liaise with the Journals Board, and the ASHA chief staff officer for science and research would serve as a staff consultant to the board.

As is currently the case, the EICs would be approved by the Journals Board and the other members of the Journals Board would be approved by the Committee on Nominations and Elections.

One position not listed as part of the Journals Board is that of editor of *CICSD*. The reason for this omission is that the NSSLHA journal is not currently part of the ASHA Journals portfolio.

Beginning in 2017, funds will need to be added to the OCB budget to accommodate a specified number of days of public member consultation with the board.

#### MILESTONE 1.3: IMPROVE THE QUALITY AND CULTURE OF PEER REVIEW

As volunteers with many competitive pressures on their time, peer reviewers are not a guaranteed resource for the program, yet they are a vital operational component. Consequently, the ASHA Journals program must ensure that these volunteers are motivated to participate and that their involvement is sufficiently rewarding that they will choose to continue to participate again when asked in the future.

At the same time, a common theme in the Journals Survey is that reviews are overly complex, nitpicking, wedded to a particular school of thought, and, on occasion, substantively inaccurate. Many respondents indicated that the review process takes too long and is too cumbersome, and that the results from one ASHA journal to the next or one submission to the next are inconsistent and unpredictable.

The transition to an editorial board model will help address many of these issues. Increasing the focus on timeliness, level, and consistency of review through templates, scoresheets, and the more flattened structure of the editorial board will increase overall speed of review. With four to six Editorial Board reviewers per Editor, there is a greater opportunity for calibration and thus consistency in review standards, tone, and overall approach. By offering better recognition to reviewers as being part of the editorial board and by empowering associate editors to instead be decision-rendering editors, there will be better recognition and an improvement in workload that will reduce difficulties with recruitment.

However, as with any new system or approach, especially one with an expanded number of people making commitments to it, fidelity of the implementation will be a function of the clarity of guidance and expectations regarding both the practical and qualitative aspects of peer review. To that end, it is recommended that a concerted effort in the form of a peer-review excellence program (PREP) be made to provide resources and support during the transition and in an ongoing maintenance and development capacity.

#### PEER-REVIEW EXCELLENCE PROGRAM (PREP)

The PREP program is a rubric under which a number of activities and resources gain a greater, more concerted focus. Initial efforts will center on development of informational and support resources, creation of structured overview and "onboarding" materials as well as more in-depth reviews on specialized topics, and improved matching of reviewers and materials based on expertise areas. Part of the goal of this approach is to effectively communicate outwardly, particularly to authors, the exact nature of the peer review approach. Having clearer expectations shared between authors and peer reviewers will improve calibration on the level of peer review and improve consistency.

#### PEER-REVIEW KNOWLEDGEBASE AND HELPDESK

Coincident with the transition to the editorial board model, the nature of what a peer reviewer or editor needs expertise on is continually evolving. The proliferation of reporting standards, for example, and the manner in which one publisher versus another implements them presents challenges to consistency and timeliness.

Likewise, as the amount published in the ASHA journals grows and the breadth of the authorship base increases, so too does variation in how research is reported and peer reviewed, including in areas such as the following:

- citation of sources,
- copyrights and permissions,
- authorship/group authorship practices, and
- ethics in research and publication.

To help preserve quality, the program has an obligation to provide its volunteers the necessary resources to obtain the desired results. At present, however, information for reviewers is only provided

on a web page for each ASHA journal and via email responses to inquiries received at a variety of email addresses. Where applicable throughout the peer-review system, there are links provided to the informational web pages. There are also bits of help text and reminders sprinkled throughout the peer-review system. All of this is a very passive system of support that suffers from a great deal of complexity and inefficiency when updates need to be made.

As the amount of information that needs to be conveyed increases, what happens inevitably with such a system is that the information becomes so imposing as to deter use, driving up the number of support inquiries fielded by the peer-review administrator and others (and thereby taking away time from processing submissions).

Rather than simply hoping reviewers navigate to and find the information they need, improved, searchable help resources need to be developed and coupled with more active orientation and development materials. This will be especially important both during the transition to an editorial board model and as new reviewers are invited to participate over time.

The Committee recommends development of a searchable knowledgebase of information rather than continuing to add to web pages of information that are increasingly difficult to organize and use. A link to the knowledgebase can be featured prominently in all applicable locations in the peer-review system and embedded on the ASHAWire platform.

Systems such as Zendesk offer custom-made knowledgebase solutions that are paired with a support helpdesk. They are very straightforward to set up and maintain, with a low annual operating cost. An additional advantage of such a system is that all searches and browsing behaviors are fully tracked. By monitoring what reviewers are seeking, the ASHA Journals program staff can more effectively hone the materials provided in the knowledgebase.

Ultimately, the addition of a knowledgebase and helpdesk leads to the best type of customer support inquiry: the one that is not needed. Giving users a greater ability to find what they are looking for lets them get back to the important work they were doing, with a positive takeaway in regard to ASHA's support for their work. A number of support inquiries will still be needed, of course, but they will fewer and able to be routed by administrative staff for response, freeing the peer-review administrator to remain focused on processing papers through peer review and into production, as opposed to performing scheduled checks of proxy email inboxes to sift through and prioritize inquiries. Likewise, the peer-review administrator's time will be freed up to contribute to the development of materials for the knowledgebase, thus accelerating improvement of the resource, quality of reviews, and favorability of perceptions of the peer-review experience with ASHA.

#### PEER-REVIEW ACADEMY

Recognizing that learning styles and knowledge levels vary from one peer reviewer to another, the Committee also recommends development of multimedia resources that support the orientation and development of reviewers. Housed in an online Peer-Review Academy, "PREP Development Modules"

would be highly visible, topic-specific overviews in an e-learning context. They would be focused particularly on the more complex elements of review and scholarship (e.g., permissions, reporting standards) that are especially affected by industry trends and evolution in best practices.

This type of approach to peer-reviewer development is now becoming commonplace in the industry, not only because complex material such as this is best approached from multiple avenues (i.e., not merely online text help), but also because the incentives for improvement are considerable for the publisher. A reduction in the number of articles entering production with unaddressed permissions problems, for example, keeps production flowing, preserves finite resources for production tasks, and lowers genuine liability risk for the publisher. It also protects the authors by reducing their exposure to unfortunate events such as corrections, errata, and retraction.

To maximize exposure of the availability of such resources, the PREP Development Modules would be featured throughout the knowledgebase and helpdesk, thereby extending the value of that resource. In addition, links can be provided in invitations to new reviewers, and as new modules are added, they can be featured as a stream of resource content in the program's other communications such as email alerts.

#### PEER-REVIEW COHORTS

At present, peer reviewers for the program are considered to be members of the "reviewer pool." With the addition of peer-review system functionality in 2014 that improved the ability to use that platform to locate reviewers according to subject area of a submission, the ASHA Journals program now has the opportunity to create more specifically defined cohorts within the reviewer pool.

Using cohort-specific flags in the system, ASHA can identify reviewers by type or broad expertise area, such as a clinician reviewer or a bilingual reviewer who could provide a useful take on a submission. With the notion of such cohorts as an option, specialized PREP Development Modules can be provided to support their specific development needs.

In addition to providing a resource for peer review, cohorts can be a way to bring new perspectives to the review of particular types of research, fostering greater engagement with research among a broader array of constituents.

The Committee recommends that the Journals Board consider options to liaise with other relevant boards and committees (e.g., the CRISP committee, the Research and Scientific Affairs Committee, and the International Issues Board) so as to inform identification and development of peer-review cohorts as warranted by the nature of the submissions being sought or received.

# **INITIATIVE 2: INCREASE STRATEGIC CONTENT DEVELOPMENT**

Despite the proliferation of research in general and the growth in the number of journals featuring CSD research (see Appendix C), the ASHA journals are in the enviable position of being published by ASHA rather than being just a few of many titles in a corporate publisher's portfolio. As such, they are better able to support the broader strategic goals of the Association.

With the recommendations detailed in Initiative 1, the editorial oversight structure of the program will enable a new, more active approach to the recruitment and development of content, one leading to publication of compelling, more highly relevant, and more broadly used and applied research.

A greater emphasis placed on strategic content development would result in the following outcomes:

- Each journal has a clear, distinct mission.
- Each journal has the right mix and range of content to appeal to its full range of envisioned users.
- Content recruitment and development efforts are informed by data from a range of sources.
- Each journal is viewed by authors as a compelling venue for particular types of submissions, and ASHA as the publisher is seen as a major positive factor influencing decisions of where to publish.

Achievement of these outcomes will be made possible by reaching the following milestones:

- Refine the Content Portfolio
- Facilitate Content Recruitment by Editors-in-Chief and Editors
- Increase Author Engagement

#### MILESTONE 2.1: REFINE THE CONTENT PORTFOLIO

The Committee reviewed the current structure of the ASHA Journals program, focusing on the four peer-reviewed journals. No change in this structure is recommended, but the Committee believes that it is important to clarify the mission statements of the four journals to show their relationship within the overall journals program and to give guidance to contributors and editors regarding the appropriateness of any given journal for a manuscript submission. The following mission statements and scope descriptions are given as preliminary examples to be considered by the proposed Journals Board. Any recommended changes would be put forth by the Journals Board for approval by the Board of Directors.

# ABOUT THE ASHA JOURNALS PROGRAM

ASHA publishes four peer-reviewed scholarly journals pertaining to the general field of communication sciences and disorders (CSD) and to the professions of audiology and speech-language pathology. These journals are the *American Journal of Audiology; American Journal of Speech-Language Pathology; Journal of Speech, Language, and Hearing Research;* and *Language, Speech, and Hearing Services in Schools.* These journals have the collective mission of disseminating research findings, theoretical

advances, and clinical knowledge in the field of communication sciences and disorders. The missions and scopes of the journals are as follows:

# AMERICAN JOURNAL OF AUDIOLOGY (AJA)

#### Mission:

AJA publishes peer-reviewed research and other scholarly articles pertaining to clinical audiology methods and issues, and serves as an outlet for discussion of related professional and educational issues and ideas. The journal is an international outlet for research on clinical research pertaining to screening, diagnosis, management and outcomes of hearing and balance disorders as well as the etiologies and characteristics of these disorders. The clinical orientation of the journal allows for the publication of reports on audiology as implemented nationally and internationally, including novel clinical procedures, approaches, and cases. AJA seeks to advance evidence-based practice by disseminating the results of new studies as well as providing a forum for critical reviews and meta-analyses of previously published work.

#### Scope:

The broad field of clinical audiology, including audiologic/aural rehabilitation; balance and balance disorders; cultural and linguistic diversity; detection, diagnosis, prevention, habilitation, rehabilitation, and monitoring of hearing loss; hearing aids, cochlear implants, and hearing-assistive technology; hearing disorders; lifespan perspectives on auditory function; speech perception; and tinnitus.

#### AMERICAN JOURNAL OF SPEECH-LANGUAGE PATHOLOGY (AJSLP)

#### Mission:

AJSLP publishes peer-reviewed research and other scholarly articles on all aspects of clinical practice in speech-language pathology. The journal is an international outlet for clinical research pertaining to screening, detection, diagnosis, management, and outcomes of communication and swallowing disorders across the lifespan as well as the etiologies and characteristics of these disorders. Because of its clinical orientation, the journal disseminates research findings applicable to diverse aspects of clinical practice in speech-language pathology. AJSLP seeks to advance evidence-based practice by disseminating the results of new studies as well as providing a forum for critical reviews and meta-analyses of previously published work.

# Scope:

The broad field of speech-language pathology, including aphasia; apraxia of speech and childhood apraxia of speech; aural rehabilitation; augmentative and alternative communication; cognitive impairment; craniofacial disorders; dysarthria; fluency disorders; language disorders in children; speech sound disorders; swallowing, dysphagia, and feeding disorders; and voice disorders.

# JOURNAL OF SPEECH, LANGUAGE, AND HEARING RESEARCH (JSLHR)

#### Mission:

JSLHR publishes peer-reviewed research and other scholarly articles on the normal and disordered processes in speech, language, hearing, and related areas such as cognition, oral-motor function, and swallowing. The journal is an international outlet for both basic research on communication processes and clinical research pertaining to screening, diagnosis, and management of communication disorders as well as the etiologies and characteristics of these disorders. JSLHR seeks to advance evidence-based practice by disseminating the results of new studies as well as providing a forum for critical reviews and meta-analyses of previously published work.

# Scope:

The broad field of communication sciences and disorders, including speech production and perception; anatomy and physiology of speech and voice; genetics, biomechanics, and other basic sciences pertaining to human communication; mastication and swallowing; speech disorders; voice disorders; development of speech, language, or hearing in children; normal language processes; language disorders; disorders of hearing and balance; psychoacoustics; and anatomy and physiology of hearing.

# LANGUAGE, SPEECH, AND HEARING SERVICES IN SCHOOLS (LSHSS)

#### Mission:

LSHSS publishes peer-reviewed research and other scholarly articles pertaining to the practice of audiology and speech-language pathology in the schools, focusing on children and adolescents. The journal is an international outlet for clinical research and is designed to promote development and analysis of approaches concerning the delivery of services to the school-aged population. LSHSS seeks to advance evidence-based practice by disseminating the results of new studies as well as providing a forum for critical reviews and meta-analyses of previously published work.

#### Scope:

The broad field of audiology and speech-language pathology as practiced in schools, including aural rehabilitation; augmentative and alternative communication; childhood apraxia of speech; classroom acoustics; cognitive impairment; craniofacial disorders; fluency disorders; hearing-assistive technology; language disorders; motor speech disorders; speech sound disorders; swallowing, dysphagia, and feeding disorders; voice disorders.

# MILESTONE 2.2: FACILITATE CONTENT RECRUITMENT BY EDITORS-IN-CHIEF AND EDITORS

It is expected that the EICs and editors will participate in content development for their respective journals. Content development strategy would include planning for the creation, aggregation, and delivery of content. This effort can take several forms, including invitations to authors to prepare manuscripts on topics of contemporary interest, development of forums or special issues, curation of supplementary data materials, and compilation of materials suited to the needs of e-learning. The

parameters of this process are dynamic as they are influenced by technological innovations in publishing and by changes in the scientific and clinical landscape. Part of the rationale for editorial budgets is that the funds will permit EICs and editors to attend professional and scientific conferences to learn of new discoveries, ideas, and developments.

Compared to the print journals era, there is a wealth of data from a variety of platforms that can now be leveraged to inform content development strategy. For example, the ASHAWire platform offers a wide array of usage and semantic affinity data that can be analyzed to spot gaps in content available versus that being sought by users. In addition, Altmetric Explorer data can provide a fuller picture of which articles are getting the most attention, use, and discussion beyond the pages of the journals. These are just two of many such opportunities now before the program, so the Committee advises that provision and analysis of such data is being operationalized among other journals in this space and should be so as well in the ASHA Journals program.

#### MILESTONE 2.3: INCREASE AUTHOR ENGAGEMENT

In the highly competitive STM publishing market, publishers are increasingly viewing the author as the customer. Each publisher seeks the best submissions and the right mix of material to constitute a publication likely to be relevant and useful to the widest possible audience, but authors now have many more options for where and how to publish their research.

With the profusion of new journals and mega-journals in recent years, and with the ongoing consolidation of publishers, competition for authors has become more intense. In addition, the nature of what authors need from a publication (e.g., multimedia components, real-time usage metrics) has changed as well, meaning that publishers have to focus on continual platform development and enhancement to avoid being seen as less able to provide maximum exposure and potential for use.

With these additional requirements, though, has also come greater opportunity, as the overall pool of potential submitting authors has grown while the need for publication has increased worldwide.

As a result, instead of primarily focusing on the peer-review and production processes associated with publication of research, journals are also now highly focused on attracting and retaining authors. Some attraction and retention of authors occurs and has occurred naturally by virtue of journal reputation and audience match/reach. A major component of attracting authors, however, now involves publication features and services combined with relationship management—or, in other words, greater attention to the overall publication experience had by authors.

Increasing engagement with authors will require a shift from the more passive model in which submissions are received, reviewed, and published to a more active model in which the authorship base is continually cultivated—one in which authors find the publication process and its results compelling enough to more readily and frequently choose the ASHA Journals program as their publishing choice.

# ASHA JOURNALS PUBLICATION EXPERIENCE

ASHA's journals have an excellent reputation for quality and, being professional society publications, a built-in audience match and reach that provides some inherent competitive advantage. The larger publishers have the upper hand, however, in development and maintenance of materials to support the overall publication experience.

Any publisher's aim in the contemporary scholarly publishing environment is to attract authors with ease of submission and publication, and then to retain those authors for future submissions by helping them maximize the visibility and use of their work.

Resource development combined with dedicated communication channels with authors forms the infrastructure for increasing author engagement. Once greater connections have been made, a focus on maintaining and strengthening those relationships through outreach and support is the key next step. Lastly, meeting or exceeding author expectations in terms of the resulting publication "product" is essential for encouraging subsequent submissions and for garnering submissions from authors who have not yet chosen to publish with ASHA. Each of these aims is covered in turn through the remainder of this section.

# **AUTHOR GATEWAY**

Authors submitting or considering submitting to ASHA's journals have many and varied questions, and they now typically have the expectation of finding answers to such questions through the type of author gateway approach in use by larger, corporate publishers such as Wiley and Elsevier.

As a central hub for information, an author gateway links authors to materials they need for publication as well as to resources they can use to maximize exposure of their current and future articles. In examining the author gateways in use by other publishers, it is clear that they are both informational and educational; one created for the ASHA journals would be an important evolution for the program that would help expand the authorship base during a time of major change for the content itself.

In combination with a greater focus on support for authors and potential authors all during the publishing process, an author gateway would help build and strengthen ASHA's presence, both domestically and internationally, as a publisher of research. This is particularly helpful for expansion of the authorship base to constituencies that might not know of or have experience with the ASHA journals. Author gateways also help ensure that submissions come in with all of the necessary components and are able to rapidly move through both the peer-review and production processes.

At present, each ASHA journal has a collection of information in its instructions for authors, its policies page, and its submission guidelines that is partially a carryover from the print paradigm and partially put together from the initial development efforts made when going online only and then from the previous to the current platform. Over those years, however, the range of deliverables, publication policies, and publication options has grown considerably, adding to the already unwieldy information load. Likewise, the program's more advanced platform capabilities and publishing processes have led to a greater need

for ongoing communication about configuration-related requirements for authors to ensure that peer review and production can happen in the most efficient and speedy manner possible.

The Committee therefore recommends that an author gateway be developed for the overall ASHA Journals program to more effectively guide authors to the information they seek and also to serve as a central hub for such information. Figure 8 represents a potential structure for an ASHA Journals author gateway.

Figure 8. A potential structure for an ASHA Journals author gateway.



# AUTHOR RELATIONSHIP MANAGEMENT

Similar to "customer relationship management" (CRM), author relationship management is a reflection of ASHA's larger ideals of excellence in all facets of member and affiliate support. Although many journal authors are not members or affiliates of ASHA at the time of publication, they are contributors and volunteers who are participating in an essential function of the Association. They also are influencers, whether directly as faculty in academic programs or indirectly as members of related professions for which stronger interdisciplinary connections are sought.

As such, it is essential that the support and assistance provided to authors at every touch point in the process be of the highest standards. Currently, however, program staff are fully consumed with production demands associated with the increasing amount being published. Support is provided via proxy email addresses and in some cases by phone. Response times for email support are continually at risk due to production demands; likewise, their handling is not as efficient as possible, in that very little time has been able to be devoted to development of help materials such as externally facing FAQs that would forestall some inquiries or an internal knowledge base that staff can use to more effectively deliver support.

Consistent with the notion of continually increasing efficiency to reduce overhead and cope with increasing volume, the Committee recommends taking the same general approach for author resource development as for peer-reviewer resource development. Specifically, the development and implementation of a knowledgebase/helpdesk is recommended.

#### EXPANDING THE AUTHORSHIP BASE

Globalization has impacted much of the American enterprise. This has involved, not surprisingly, the submission as well as publication of scholarly articles in ASHA's journals. Increasingly, individuals, many of whom speak and write English as a second language (ESL), are submitting their studies to ASHA journals for publication. Engaging with and guiding these ESL authors in addition to assisting those for whom English is their native language—particular early-stage investigators—constitutes a challenge for the ASHA Journals program.

#### SCHOLARONE LANGUAGE TOGGLES

Given the aforementioned globalization of scholarly publications, the coming years should witness a steady if not increasing number of ESL authors submitting to/publishing in ASHA Journals. Although these ESL authors will use English to submit to and publish in ASHA Journals, it is believed that initial language-friendly interfacing, particularly during the submission process, should greatly facilitate their ASHA Journals publication experience. With the above in mind, a Chinese language toggle for ScholarOne should be developed. The initial toggle, it is suggested, should be for authors whose native language is Chinese, one of the larger groups of ESL scholars submitting to our journals. Based on experience with this initial ScholarOne language toggle, it is suggested that ASHA journals configure for

use and activate additional language toggles (e.g., Japanese or Portuguese [Brazil as well as Portugal]) as they become available.

# **AUTHOR ACADEMY**

Although both the aforementioned language toggles and author gateway should significantly help the ESL author, early-stage ESL authors will likely still experience challenges submitting to ASHA Journals. These individuals will probably need more fundamental training regarding journal publication/submission.

To that end, the ASHA Journals program has as part of its roadmap the development of an author academy (similar to the peer-review academy covered in Initiative 1). The Committee endorses this approach and suggests making the ESL author aware of the author academy through prominent links in the recommended author gateway detailed earlier in this initiative.

Overall, the above represents the Committee's suggestions for clarifying, more thoroughly explicating, and better organizing the information and guidelines needed by authors publishing with, or considering publishing with, the ASHA Journals program. Such suggestions should facilitate this process for both the native English-language as well as ESL author. By so doing, authors' ability to engage with ASHA Journals should be more straightforward as well as transparent, something that should contribute to increased levels of author satisfaction and success with the ASHA Journals program.

To bring these various changes to fruition will require some expenditure of time and effort, but upon study of the challenge of increasing author engagement, such expenditures appears quite worthwhile if not crucial for both the continuance as well as furtherance of the objectives of the ASHA Journals program.

# INITIATIVE 3: GROW THE VISIBILITY, IMPACT, AND USE OF JOURNALS

The "journal" in the conventional sense of the word was simply a container. The journal itself and the items contained within it composed a structured way of disseminating new knowledge on an array of topics. Journals were very successful at doing that, so much so that they proliferated in tempo with the expansion of scientific inquiry. In short order, though, massive machinery had to be developed to house, catalogue, index, and preserve the vast quantity of knowledge able to be produced by this mechanism.

Over time, organizing the literature and locating items within it became a science in itself, with shortcuts developed along the way—things like Impact Factors that point the user to the containers with the most cited content. Journal brands developed, capitalizing on such metrics and other indicators of reputation and authority. But the discovery side of the science equation became ever more cumbersome as the amount of research published grew exponentially. This was a reflection of good things, ultimately. Science was continuing to expand, and rapidly so. But it increasingly slowed the process of reporting new knowledge and hindered deep investigation and analysis of the published literature.

Ultimately, within the past two decades, the container for research broke under its own weight. Journals were, out of necessity, among the first types of structured content to make the migration to online delivery, and current standards for web publication are largely an outgrowth of that migration. Not surprisingly, the continued development of web publishing technologies has radically changed the role of the publisher and the nature of how a journal functions to help advance research.

As before, though, the challenge for the publisher and the end user amid the volume of research being produced is in discovery and assessment of relevancy/applicability. For end users who are authors, *relevancy* means the extent to which the publisher is able to deliver on the author's expectations in terms of speed of publication and the visibility and perception of the content once produced. For end users who are subscribers, *relevancy* means value in the form of a substantial and steady stream of content that meets their array of needs.

Therefore, the Committee recommends that the ASHA Journals program invest greater effort into growing the visibility, impact, and use of the journals.

#### MILESTONE 3.1: DEVELOP A RAPID PUBLICATION MODEL

All online journal publishing is driven by XML, or extensible markup language. This is a form of code that is used to generate the HTML code behind what is seen in the browser by the user. For many years, it has been recognized that the fastest way to get an article published online would be to write it directly in the same software program that would be used to format and produce it. The dilemma has always been that working within the composition software involves extensive manipulation of code—a skill not typically held by most authors or really anyone other than a composition vendor such as the one in use for the ASHA journals for more than a decade.

However, the latest (HTML5) browser standard has been a transformational one, and the latest iteration of XML code for journal publishing was designed specifically to work seamlessly with HTML5. What that allows for is the typical-looking authoring software environment within the browser, with the necessary XML code being added and manipulated behind the scenes with every edit or addition being made.

XML authoring is the "holy grail" of truly XML-first production, and it is in use now by the high-volume mega journals such as *eLife* and *PLoS One*. It is also an option now on many high-profile journals such as *Nature* and *Frontiers*. The Committee does not expect or anticipate that XML authoring will become the norm for the ASHA journals in the near term. However, the growing implementation of it by major journals signals a change in expectations that the ASHA Journals program must be aware of. The Committee recommends that the program phase in an XML-first production model in order to provide production expectations consistent with those offered by the larger publishers with which the program competes.

XML authoring means nearly instantaneous publication upon acceptance. Until 2015, the lag from acceptance to publication for the ASHA journals was more typically in the range of 6–9 months. Through continuous publishing and the expansion of capacity via outsourcing of copyediting, that lag has now been reduced to 3 months. This timeframe represents the shortest interval possible without adding production capacity for the integration of author revisions and other proofing changes, given the volume currently being produced. The large, corporate publishers (e.g., Elsevier), which have already shifted in large measure to an XML-first publication model, are able to offer average lags from acceptance to publication that are under 30 days.

The Committee recommends that the ASHA journals switch as soon as possible to XML-first production not only because of the expectations being set for the interval from acceptance to publication, but also because getting articles produced as rapidly as possible is an essential part of maximizing impact and visibility.

Impact, in terms of the Impact Factor, is a time-dependent measure. The longer an article is present and able to be cited within a 3-year window, the more its citations are able to contribute to the overall Impact Factor calculation. Likewise, the more quickly an article is produced, the more quickly mentions are made online and the more quickly Altmetric-measured impact is tracked. Publishers able to maximize both of those types of impact will dominate their Impact Factor categories. They will also be seen increasingly as the venues of choice for being able to generate visibility, coverage, and use for their authors' works.

# MILESTONE 3.2: EXPAND CONTENT CURATION AND PROMOTION

Content curation supports the telling of the story of the research. The ASHAWire platform was the first major step in expanding content curation. By automatically adding articles to topic collections upon publication, a new avenue of discovery was made available. Further, connecting all the articles via related content widgets allowed for deeper exploration of the literature. ASHAWire also brought

together, for the first time, *The ASHA Leader*, the SIG *Perspectives*, and the ASHA scholarly journals into a single, context-rich portal of discovery.

Expanding content curation takes that effort further—connecting discovery more directly to the publication of new content as well as digging more deeply into the wealth of material connected via the platform. Newness of content online is an important driver of coverage. Coverage yields mentions in a wide range of channels, extending the reach of the research well beyond the initial publication event. All of that exposure is the fuel for impact. More people, both within and beyond the discipline, become aware of this type of research and of ASHA as the source. That visibility contributes to impact, both in clinical practice and at the policymaking level, as well to "impact" as a barometer of journal and article quality.

The Committee's recommendation in expanding content curation is simply to endorse the continued and growing social media presence for the ASHA journals. Awareness via such channels is a key source of traffic to and usage of the articles and of the digital library of information on the ASHAWire platform. Resources will need to be devoted in greater measure to foster deeper engagement with and discussion of research, so the ASHA Journals program should make that a core focus of the work done in-house. ASHA Journals staff work closely with authors and manage the pipeline and flow of articles already, so all of the key ingredients are in place to leverage those activities to boost engagement significantly beyond current levels. That will take coordination with other groups in the National Office, as well as development of resources for authors, editors, and users.

In a dynamic and evolving area such as content curation, the Committee endorses the principle of expanding efforts in this area, leaving the operational plan for how to do so to the appropriate decision-making bodies in ASHA.

#### MILESTONE 3.3: EXPAND KNOWLEDGE TRANSLATION EFFORTS

The Committee discussed a number of potential developments in the form of content enrichment that can better allow for clinicians and others to make more effective use of research. These include clinical relevance statements, graphical abstracts, expanded multimedia such as author interviews, and continued publication of supplemental materials, especially those that can facilitate knowledge translation. All of these efforts are endorsed by the Committee.

In addition, the Committee recommends addition of the GrowKudos service into the ASHAWire platform as a way of integrating many such knowledge translation elements into a cohesive addition to articles. GrowKudos (see <a href="https://www.growkudos.com/">https://www.growkudos.com/</a>) is a service that has been rapidly adopted by the STM publishing industry since its launch in early 2014. It recently won the 2015 Innovation Award from the Association of Learned and Professional Society Publishers and has been shown in a number of publisher-specific case studies to multiply the number of article downloads and number of author-conducted promotional efforts.

By integrating knowledge translation efforts by the publisher into a cohesive, central point, and by providing to the publisher a dashboard showing how and the extent to which each author uses the

service to promote his or her articles, GrowKudos has become an important operational tool that makes more wide scale promotion of research have a greater return on investment. At the same time, the result of having such a service in place is that the publisher's Altmetric scores grow as the articles are used more often and more broadly.

Journal content, whether in the form of the primary research piece itself or forms of enrichment layered onto it, will continually be evolving so as to promote discovery and usage. Both the publisher and author have strong incentives to drive that effort. Likewise, the journal publishing mechanism itself includes manuscript types such as systematic reviews and meta-analyses that synthesize information, and that typically are highly cited (and thus encouraged) forms.

However, more active knowledge translation among a broad range of constituents can be achieved through a greater reliance on structured learning activities. Expanding professional development exercises involving journal articles is the typical modality, but with the much more segmented, topically focused streams of content now available on the ASHAWire platform (or by selecting related batches of articles from those streams), there are greater opportunities to connect the curation effort to the knowledge translation effort.

Approaches such as online journal clubs, research-focused blogs, and social media—facilitated discussion of articles are rapidly growing in popularity in the industry. All emphasize interaction and peer exchange, as opposed to the more passive form of self-study that constitutes the dominant form of structured learning associated with articles in the ASHA journals.

The ASHA Journals pilot program with the "WeSpeechies" group on Twitter is an example of a change in direction in which interaction and peer exchange are emphasized as the driver of knowledge translation. Since late 2014, the WeSpeechies group has identified up to 10 ASHA journal articles to be discussed over the course of a weekly online discussion of a particular research or clinical practice topic. The 10 articles are set for free access by ASHA for a 2-week period to encourage deeper exploration of the literature on the particular topic being discussed. Several thousand users worldwide then observe and/or take part in discussions on the topic, many of which relate to or focus on the particular research articles.

The pilot effort has generated many thousands of article downloads, helped fuel vibrant discussion online, and grown Altmetric scores as a result (while also permanently connecting those discussions via the Altmetric dashboard now associated with every article). Presumably, although this has not been measured in any way, the discussions or reading of the discussions helps convey research concepts and issues while also generally boosting awareness of them.

Perhaps just as important, efforts such as the WeSpeechies pilot also serve to expand or form new connections between peers, another key aspect of the more active knowledge translation effort. Without peer-to-peer exchange, it is hard for any individual to know what he or she doesn't know. Expanded peer networks serve to refine knowledge. By more rapidly contributing to the synthesis and integration of concepts, peer networks and structured learning activities allow for a greater flow of information, broadly contributing to a gain in the overall knowledge base.

Much of this kind of work, though, is outside the day-to-day business of publishing research. For that reason, the Committee recommends that ASHA consider the necessary operational linkages to facilitate growth in the structured learning opportunities possible with research as it is presently being published and disseminated. Those linkages can and should include connections of research articles to other content published by ASHA, such as the Special Interest Group *Perspectives*. With the already topically focused affiliate base of the Special Interest Groups, a number of natural synergies likely exist in terms of connecting journal articles to the translational materials being published in *Perspectives*.

#### MILESTONE 3.4: BROADEN THE SUBSCRIPTION BASE AND PRODUCT OFFERINGS

It is essential that the ASHA Journals program continues to seek new markets for its subscription products. Subscriptions are the business model for the program and, in conjunction with content aggregation (i.e., third-party bundling and delivery of many titles across publishers), the mechanism by which academic programs receive access to the content.

With the launch of the ASHAWire platform and the fully interconnected knowledgebase that it represents, the ASHA Journals program has a greater value proposition to offer institutional subscribers in the form of direct subscription access as opposed to aggregator-provided access. Access provided by content aggregators is typically to the PDF version of articles and a rudimentary HTML version built by the aggregator from ASHA's contractually supplied XML files. Institutions obtaining access via an aggregation, therefore, do not get the benefit of the semantic tagging on the platform, which yields the related content recommendations, topic collections, and the added context provided by the interconnected portfolio of publications.

Although increasing the number of institutional subscribers with direct subscription access would result in greater revenues and likely higher usage and impact, ASHA also has a less-obvious incentive to promote such access. Over time, usage of content delivered via the ASHAWire platform (as opposed to a content aggregator's platform) builds greater intelligence about the content assets and the manner in which users interact with them. In a content aggregation, very little understanding is gained by the publisher with regard to how the content is used, whereas usage via ASHAWire is extensively tracked and is characterized by the same tagging, among other dimensions, applied to the content. To the extent that direct subscription access contributes to this usage tracking, ASHA develops correspondingly stronger semantic affinity profiles of users. These and other aspects of usage data can then be used strategically to curate individual pieces or collections of content. Such data can also be used to inform the ASHA Journals program's content recruitment and development efforts.

The ASHAWire platform provider, Silverchair Information Systems, also has on its technology roadmap functionality that will allow publishers to sell subscriptions to bundles of content. Within the next 6 months to a year, ASHA could have the opportunity to sell subscription access to individual topic collections, thus potentially opening up additional revenue streams.

The Committee, therefore, endorses the following five recommendations for improving the marketing and fulfillment of journal subscriptions.

# INCREASE SCALE OF CURRENT EFFORTS

Most of the methods currently in use to sell journal subscriptions are designed to be scaled up as additional resources become available or particular regions are targeted. As the journals program becomes more visible, there will need to be increasing use of Google AdWords, LinkedIn ads and sponsored content, and email campaigns. There also will be the need to delve deeper into various data points, such as home institutions for ASHA-published authors, the home countries of published authors, and topic affinity data, to develop campaigns for specific regions or markets.

# SUBSCRIPTION SALES AGENTS

Contract with local sales agents in high-potential markets, such as Brazil, China, Korea, and India. Having a local presence "on the ground" will help ASHA to navigate cultural differences, to minimize risk due to currency fluctuations, and to develop an accurate picture of local market forces. Agreements can vary in complexity from simple market research services to active selling and negotiating consortia deals.

#### EXHIBITING AT KEY CONFERENCES AND EVENTS

Increase the visibility of ASHA's journals by becoming a presence at library shows, selected book conferences, and academic and research conferences. Exhibits at library shows and book fairs would be tied to sales efforts for particular regions and in many cases could be handled by the Sales Agent for the region. Exhibits at academic and research conferences would be coordinated with author and editor attendance and recommendations.

# **DIRECT MAIL CAMPAIGNS**

Launch targeted direct mail campaigns to attract new subscribers. This effort would supplement current e-mail campaigns. Buying lists for actual postal addresses is still more streamlined and targeted than e-mail list buying, and direct mail has the potential to be more effective in certain international markets.

#### **ONLINE PAYMENTS**

Develop and implement the ability to place new orders and renew existing orders online, with online payment. Without the online payment option, potential subscribers must step away when they are potentially ready to buy immediately. Online ordering expedites access to content, and sales and ultimately readership due to the elimination of extra steps required in gaining access.

# **SUMMARY OF RECOMMENDATIONS**

The ASHA Journals program is a vibrant part of the ASHA Publications program, itself a significant portion of the Association's overall content strategy in support of its Strategic Pathway Objectives. ASHA Journals content is a major source of referral traffic to resources on <a href="www.asha.org">www.asha.org</a>, and it is part of a proven member engagement tool in the form of source content for professional development. It is also—as stated by members—a highly valued benefit of membership.

For 80 years, ASHA has published in its journals a wide array of research on an ever-changing and developing range of topics in CSD. The content is well known and well respected in several growing segments of the scholarly publishing industry. Considered by many to be the flagship journals in CSD, the ASHA journals are well cited, high impact publication venues that attract a growing number of submissions of high-quality research by influential authors.

Many of the authors published in the journals or researchers involved in the editorial and peer-review process ultimately serve as volunteer leaders of the Association at a variety of levels. From peer reviewers to editors to members of the Publications Board, those involved in the ASHA Journals program are doing foundational work as thought leaders in the discipline. Involvement with the Journals program has figured prominently in the development of successive generations of researchers and academicians focused on strengthening the evidence base for clinical practice in audiology and speech-language pathology.

The ultimate value contained within the journals' published content is in great measure a product of the commitment and support of these volunteers and volunteer leaders. Thus, it is incumbent upon ASHA as the publisher and archivist to ensure, above all things, that the ongoing stewardship of this scientific endeavor and the translation of its output to clinical practice be strategically guided for the long term.

# REFERENCES AND RESOURCES

# **REFERENCES AND RESOURCES**

#### References

American Speech-Language-Hearing Association. (1997). *Omnibus survey results: 1997 edition*. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2009). 2009 Membership Survey summary report: Number and type of responses. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2015). 2015 International Affiliates Survey. Rockville, MD: Author.

Council of Science Editors, Editorial Policy Committee. (2012). CSE's white paper on promoting integrity in scientific journal publications, 2012 update. Available at

http://www.councilscienceeditors.org/resource-library/editorial-policies/white-paper-on-publication-ethics/

Membership matters: Lessons from members and non-members. (2015, March). Hoboken, NJ: Wiley. Available from http://exchanges.wiley.com

Ware, M., & Mabe, M. (2015, March). *The STM report: An overview of scientific and scholarly journal publishing* (4<sup>th</sup> ed.). The Hague, the Netherlands: International Association of Scientific, Technical, and Medical Publishers.

#### Resources

Adams, J., & Loach, T. (2015, February). *Altmetric mentions and the communication of medical research: Disseminating research outcomes outside academia*. London, United Kingdom: Macmillan Digital Science. Available at http://www.digital-science.com/resources/digital-research-report-altmetric-mentions-and-the-identification-of-research-impact/

Jefferson, T. Alderson, P., Wager, E., & Davidoff, F. (2002). Effects of editorial peer review: A systematic review. *JAMA*, *287*, 2785-2786. Available from http://jama.jamanetwork.com

Smith, R. (2006). Peer review: A flawed process at the heart of science and journals. *Journal of the Royal Society of Medicine*, 99, 178. Available at http://jrs.sagepub.com/content/99/4/178

Smith, R. (2010). Classical peer review: An empty gun. Breast Cancer Research, 12(Suppl. 4), S13

# **APPENDIXES**

# APPENDIX A: ASHA SCHOLARLY JOURNALS SURVEY REPORT (JULY, 2014)

On May 6, 2014, ASHA fielded an online survey to past and present (2002 to 2014) ASHA journal authors/co-authors of submitted content, reviewers, associate editors, guest editors, and editors who had provided ASHA with an e-mail address and hadn't opted out of receiving web surveys (n = 12,868). The purpose of the survey was to assess the strengths and weaknesses of the current scholarly journals program. Follow-up reminders were sent to non-respondents on May 16 and 28. The survey was closed on June 5.

Of the 12,868 individuals, 1,215 had undeliverable e-mail addresses and 47 opted out of this and future online surveys, leaving 11,606 possible respondents. The actual number of respondents was 1,295, for an 11.2% response rate.

In the "Findings" section of this report, survey results are presented for 4 groups for most questions: overall, authors, reviewers, and editors. Overall = all respondents. Author = author/co-author of submitted content only. A reviewer may also be an author/co-author. An editor may also be a reviewer and/or an author/co-author. (See question 9, page 15.) Significance testing has not been conducted to determine if differences in the responses of these groups are statistically significant. Testing can be conducted upon the request of the survey sponsor.

#### SUMMARY OF FINDINGS

# RESPONDENT DEMOGRAPHICS

- The majority (79.5%) of respondents hold the PhD.
- Most conduct research in the area of speech-language pathology (59.5%), followed by language science (28.4%), speech science (21.7%), audiology (18.9%), and hearing science (16.8%).
- Most are college or university professors (65.9%) or researchers (50.4%).
- Nearly half (41.2%) have been employed in the discipline or a related discipline for more than 15 years since completing their highest degree.
- More than two-thirds (69.5%) are women.
- The majority reside in the United States (64.2%), followed by Canada (4.7%), the United Kingdom (3.9%), and Australia (3.3%).

# **ASHA AFFILIATION**

- More than half (56.9%) of respondents hold ASHA membership (with or without certification).
- Nearly half (41.6%) hold the CCC-SLP and 8.0% hold the CCC-A.

#### ROLE AND EXPERIENCE WITH THE ASHA SCHOLARLY JOURNALS

- Most (86.7%) respondents were authors or co-authors of one or more manuscripts that were submitted to an ASHA journal; 60.7% had provided peer review; and 15.1% were associate editors, guest editors, or editors for an ASHA journal or journal section.
- More than half (57.4%) had submitted a manuscript to an ASHA journal within the past 2 years. About a third (36.7%) indicated that the last time an ASHA journal published an article they authored or co-authored was within the past two years.
- More than a third (38.7%) indicated that 1–2 articles authored or co-authored by them had been published in an ASHA journal. Nearly a third (32.4%) did not have any publications in the ASHA journals.
- Almost half (45.0%) had submitted 1–2 manuscripts that were rejected/never published in an ASHA journal.

# EXPERIENCE WITH PEER-REVIEWED NON-ASHA JOURNALS

- Most (80.1%) respondents had submitted a manuscript to a peer-reviewed non-ASHA journal within the past 2 years.
- About three-quarters (73.5%) indicated that the last time a peer-reviewed non-ASHA journal published an article they authored or co-authored was within the past two years.

Respondents were given a list of 127 peer-reviewed non-ASHA journals and asked to select the ones in which they had published their 5 most recent articles. They most often selected the *Journal of the Acoustical Society of America* (4.7%), the *International Journal of Language and Communication Disorders* (3.9%), the *Journal of Communication Disorders* (3.7%), *Ear and Hearing* (3.5%), and *Clinical Linguistics and Phonetics* (3.2%).

Respondents were then asked to select the non-ASHA journals for which they had provided their 5 most recent peer reviews. They most often selected the International *Journal of Language and Communication Disorders* (5.8%), *Ear and Hearing* (4.5%), the *Journal of Communication Disorders* (4.1%), the *Journal of the Acoustical Society of America* (3.9%), and the *International Journal of Audiology* (3.7%).

In "other" comments, respondents listed nearly 600 peer-reviewed non-ASHA journals in which they had published their 5 most recent articles, and nearly 400 for which they had provided their 5 most recent peer reviews. The journal named most often for publications and peer reviews was the *International Journal of Speech-Language Pathology*.

#### SUBMISSION OF MANUSCRIPTS TO THE ASHA SCHOLARLY JOURNALS

 Respondents indicated that if the nature of their research was a good fit for an ASHA journal, they were "very likely" (38.0%) or "somewhat likely" (36.8%) to submit a manuscript to an ASHA journal.

- Respondents were asked to rate the importance of 8 factors in choosing where to submit their research for publication. More than half (64.2%) gave "journal focus" the highest rating of importance, followed by "fit" (62.7%), and "fairness/quality of peer review" (59.7%). In their comments, quite a few emphasized the importance of journal accessibility.
- More than half (59.8%) had submitted manuscripts to both an ASHA scholarly journal and a peer-reviewed non-ASHA journal. Of these, most (at least 59.7%) reported that communications about their manuscript, policies and procedures, and services/resources for authors were "about the same" for the ASHA and non-ASHA journals. Two other aspects of the ASHA journals submission process—fairness/quality of the peer-review process and timeliness of the submission and peer-review process—compared somewhat less favorably.

# QUALITY AND USEFULNESS OF THE ASHA SCHOLARLY JOURNALS

- Almost half (47.9%) of respondents "definitely would" recommend the Journal of Speech,
   Language, and Hearing Research as a publishing venue to a colleague if the nature of his or her
   research was a good fit for the journal; 32.8% "probably would."
- In the past year, 43.0% had accessed an ASHA journals(s) "more than 20 times" to read articles.
- Respondents were asked to rate how well the ASHA journals function to advance 13 areas of research. Most (at least 55.2%) gave "clinical practice research: overall," "clinical practice research: diagnosis and assessment," and "basic research" positive ratings (1s or 2s).
   "Scholarship of teaching and learning," "qualitative research," and "single-subject design" received the lowest ratings.
- Respondents were asked to rate how well the ASHA journals serve as a resource for evidence
  that can be used to guide or be applied in clinical practice. About half (at least 45.0%) gave the
  Journal of Speech, Language, and Hearing Research, the American Journal of Speech-Language
  Pathology, and Language, Speech, and Hearing Services in Schools positive ratings (1s or 2s).
  Most (70.9%) did not know how well the American Journal of Audiology serves as a resource in
  this way.
- Almost half (47.9%) indicated that when reviewing a researcher's credentials, they regard
  publications listed for the *Journal of Speech*, *Language*, and *Hearing Research* "very highly."

# THE PEER-REVIEW PROCESS FOR THE ASHA SCHOLARLY JOURNALS

Respondents were asked what influences their decision to accept an invitation to review a scholarly article. Of the 9 possible choices, percentages were highest for "my available time" (87.9%) and "my interest in the research presented in the article (84.2%).

- Most (58.3%) would rather receive a review that has a defined structure, template, or rating system than one that is primarily open ended.
- Most (61.9%) would rather complete a review that has a defined structure, template, or rating system than one that is primarily open ended.

• More than half (52.1%) have submitted a manuscript pertaining to clinical practice research to an ASHA journal. Of these, 69.7% felt the review received was at the right level of rigor for this type of research.

# QUALITY OF THE NEW WEBSITE FOR THE ASHA SCHOLARLY JOURNALS

- A little less than half (41.8%) of respondents had accessed the new website for the ASHA journals—ASHAWire (pubs.asha.org)—that launched in January 2014.
- When asked to compare the performance of the former journals website and ASHAWire, 40.7% of users described their experience with ASHAWire as "somewhat improved;" 21.1% described it as "greatly improved."

# FOLLOW-UP

More than a quarter (29.0%) of respondents would be willing to be contacted in the event that ASHA would like to call or e-mail them with follow-up questions.

# **APPENDIX B: TRENDS IN STM PUBLISHING**

## **ACCESS**

One of the most important trends affecting scholarly publishing is the continual evolution in how journals are accessed. For the bulk of their history, print-level use of journals was monitored at the library level to the extent that it could be (e.g., via accessioning records for bound issues and via interlibrary loan requests) and there was very little information available for consideration beyond that.

With the shift to online journals, libraries began to have a much greater amount of data on which to base their decisions about collection management. When the prevailing paradigm in the 1990s and 2000s was print plus online, it was difficult for a library to get a pure idea of level of use, but the added level of online data was so valuable, but so variable, that standards for its reporting were developed (e.g., COUNTER, SUSHI).

As journals have shifted to online-only access, which is still a developing trend, libraries have gotten that more pure level of usage data, but by the same token, the shift to different forms of online access (e.g., mobile, on campus versus off) has proven challenging to track and govern.

Moreover, the workload of managing data and making decisions at the individual journal level has become so high in an era of library budget cuts and expansion of titles that access via aggregators and consortia have been defining transitions over the past two decades as well.

Developing in concert with these more mechanical aspects of access has been the argument that access to publicly funded research should be open to the public. This has fueled the development of an entire market segment of the STM publishing industry, one that has been very disruptive to publishers' traditional business models.

# **DISCOVERABILITY**

The technology for information discovery is now beginning to catch up with the deluge of online content. With semantic metadata, materials can be more easily and more meaningfully connected on the web. In addition, the adoption of component-level metadata has allowed for pieces of articles to be displayed and obtained separately.

Now that an online research article may have links to the supporting data sets or videos of clinical or experimental techniques embedded, each of those items is itself discoverable and usable. In addition, each of the social platforms in which content may be discussed and shared contains a robust search engine, and the content on all of these platforms is crawlable by Google and other search engines.

All of these elements combine to create opportunities for development of a more enriched publishing mechanism for research that can take fuller advantage of these multiple pathways into and through the literature.

Component-level information consumption has changed discovery entirely. With semantic metadata, materials can be easily connected on the web. So a research article may have links to the supporting data sets or videos of techniques being tested. All of these elements combine to create a more enriched publishing mechanism for research. More powerful technological tools in science are increasingly magnifying how it is disseminated, capitalizing on the potential to better convey the information and gain benefit from its use.

#### PEER-REVIEW APPROACHES

As the number of professional commitments has grown for researchers, and as speed to publication has become more of an essential competitive element for publishers, variations on the traditional peer-review model have developed. Rather than emphasize significance, publishers and editors are now more often exploring the notion of reviewing for suitability.

This has been aided in the past decade by the continued growth and adoption of reporting frameworks and standards for particular types of studies. With evolution in online access and improvements in discoverability, the trend has been to let the research get published and allow the potential users to evaluate its merits. Supporting the latter notion have been developments in real-time usage metrics, social sharing data, and comments attached to articles. These sorts of mechanisms have also given rise to open peer-review and postpublication peer-review models.

#### **GLOBALIZATION**

With the larger societal trends around globalization, publishers have recognized the value in having diverse revenue streams from a wider range of markets. This has been a sound strategy especially given the variation in governmental commitments to the funding of science and research in one region versus another. Likewise, such a strategy is essential for limiting the effects of declines in institutional revenues in individual countries or regions that are associated with fluctuations in macroeconomic conditions.

Factoring into the larger globalization trend are issues related to access, diversity and cultural competence, distribution networks, language, and authorship.

#### RESEARCH EVALUATION

Whereas journal reputation and Impact Factor were dominant considerations in evaluating the work of researchers, other trends have enabled a broader range of criteria to come into play. Dynamically updated measures of online use and discussion about research at the article level (i.e., alternative bibliometrics, or Altmetrics) are now being examined. Such data are also filtering up into data systems that characterize the research output of programs and the aggregated impact of the researchers in those programs. Although the Impact Factor remains the dominant metric for evaluation of the quality of a journal, it is increasingly one of many data points that are considered in the evaluation of a journal or of an author's research output.

#### DATA STEWARDSHIP AND CURATION

Now that so much effort has been devoted to the public access and preservation of research articles that are the product of taxpayer or foundation funding, attention is turning to the access and preservation of the underlying data associated with the research.

Aimed at building transparency and ensuring replicability, movement toward a culture of open data is also capitalizing on the technological tools for its curation, mining, and preservation. For publishers, developments in this area could call for major redesigns and reconfiguration at the platform level, but a developing ecosystem of well-curated and highly discoverable research data is also a significant opportunity. Coupling data with the online article is a value-add for the end user, and user discovery of data in repositories is a pathway back to the source content that may not have been as visible to users in other disciplines.

# ARTICLE EVOLUTION

Freed up from the limitations of print, research articles are being reconceptualized to match and exceed users' expectations of online content. They are now becoming more expansive containers for the fuller experience of the research. Embedded multimedia, linked data, interactivity, and added context are all developing features of the continually evolving article.

# COURSEWARE AND E-LEARNING

As more expansive units of knowledge delivered via advanced technological platforms, online research articles can now be more easily bundled together to support broader learning aims. Publishers are increasingly developing content streams that can be incorporated into courseware and integrated with learning management systems.

# APPENDIX C: COMPETITIVE LANDSCAPE FOR CSD AND RELATED JOURNALS

CSD research is highly interdisciplinary and is a growing segment of the STM publishing space. In an industry with increasing competition for authors, it is important to be cognizant of the range of choices available for publication as well as of how the ASHA journals are rated against other journals in terms of impact.

# FREQUENT PUBLISHING VENUES FOR ASHA JOURNALS AUTHORS

As shown in the 2014 ASHA Journals Survey, there are hundreds of journals in which ASHA Journals authors publish. This table of the most commonly selected journals indicates a broad range of coverage areas, reflective of the interdisciplinary nature of this research.

Table C1. List of journals in which surveyed authors have published up to their five most recent articles.

Non-ASHA Journal	Percentage	Number
American Journal of Gastroenterology	0.1	2
American Journal of Otolaryngology	0.3	8
Annals of Dyslexia	0.3	7
Annals of Otology, Rhinology, and Laryngology	0.8	22
Aphasiology	3.0	81
Applied Psycholinguistics	2.1	57
Archives of Otolaryngology—Head & Neck Surgery	0.5	13
Archives of Physical Medicine and Rehabilitation	0.7	20
Asia Pacific Journal of Speech, Language and Hearing	0.7	19
Assistive Technology	0.0	1
Audiology and Neuro-Otology	0.4	12
Behavioral Neurology	0.1	4
Bilingualism: Language and Cognition	1.0	26
Brain	0.4	11
Brain and Language	1.7	46
Brain Injury	0.6	15
British Journal of Developmental Psychology	0.3	7
Canadian Journal of Speech-Language Pathology and Audiology	0.9	25
Chemical Senses	0.0	0
Chest	0.0	1
Child Development	1.1	31
Cleft Palate-Craniofacial Journal	0.8	22
Clinical Linguistics and Phonetics	3.2	87
Cochlear Implants International	0.4	12
Cochrane Database of Systematic Reviews	0.0	0
Cognition	0.6	16
Contemporary Issues in Communication Sciences and Disorders	0.8	22
Cortex	0.4	11
Current Psychology Letters	0.0	0
Developmental Medicine and Child Neurology	0.3	9
Developmental Science	0.9	24
Disability and Rehabilitation	0.5	14

Dyslexia	0.3	8
Dysphagia	1.2	32
Ear and Hearing	3.5	96
Early Childhood Research Quarterly	0.7	20
Early Childhood Services	0.0	0
Early Education and Development	0.3	9
ЕСНО	0.2	6
Exceptional Children	0.3	7
Folia Phoniatrica et Logopaedica	1.4	37
Hearing Research	1.1	30
Human Brain Mapping	0.2	5
IEEE/ACM Transactions on Audio, Speech, and Language Processing	0.3	8
International Journal of Audiology	3.1	83
International Journal of Epidemiology	0.0	1
International Journal of Language and Communication Disorders	3.9	106
International Journal of Pediatric Otorhinolaryngology	1.2	32
International Journal of Rehabilitation Research	0.1	3
International Journal of Therapy and Rehabilitation	0.1	3
Japan Journal of Logopedics and Phoniatrics	0.1	3
Japanese Journal of Communication Disorders	0.1	2
Japanese Journal of Speech, Language, and Hearing Research	0.1	4
Journal for the Association for Research in Otolaryngology	0.6	16
Journal of Allied Health	0.3	9
Journal of Applied Oral Science	0.1	2
Journal of Autism and Developmental Disorders	1.0	27
Journal of Biomechanics	0.1	2
Journal of Child Language	2.3	62
Journal of Child Neurology	0.1	3
Journal of Cognitive Neuroscience	0.2	5
Journal of Communication Disorders	3.7	100
Journal of Dental Education	0.0	0
Journal of Developmental and Learning Disorders	0.0	0
Journal of Experimental Psychology	0.6	17
Journal of Fluency Disorders	1.1	30
Journal of Hearing Science	0.0	1
Journal of Intellectual Disability Research	0.1	4
Journal of Interactional Research in Communicative Disorders	0.2	5
Journal of International Neuropsychological Society	0.1	4
Journal of Learning Disabilities	0.7	19
Journal of Medical Speech-Language Pathology	1.5	41
Journal of Memory and Language	0.3	9
Journal of Neurolinguistics	0.7	20
Journal of Neuroscience	0.4	11
Journal of Oral Rehabilitation	0.3	7
Journal of Pain and Symptom Management	0.0	1
Journal of Pediatric Rehabilitation Medicine	0.0	0
Journal of Psycholinguistic Research	0.4	10
Journal of Rehabilitation	0.0	1
Journal of Rehabilitation Medicine	0.1	3
Tournes of Heridamication includence	0.4	11

Journal of the Academy of Rehabilitative Audiology	0.4	10
Journal of the Acoustical Society of America	4.7	127
Journal of the American Academy of Audiology	2.5	69
Journal of Voice	2.7	73
Journals of Gerontology	0.1	3
Language Learning and Development	0.5	14
Laryngoscope	1.2	33
Lingua	0.4	10
Logopedics, Phoniatrics, Vocology	0.8	23
Memory and Cognition	0.2	5
Mental Retardation	0.0	1
Mental Retardation and Developmental Disabilities Research Reviews	0.0	1
Neurolmage	0.5	13
Neuropsychologia	0.7	20
Neuropsychology	0.2	5
NeuroReport	0.2	6
Open Access Animal Physiology	0.0	1
Pediatric Rehabilitation	0.0	0
Pediatrics	0.4	10
Perception & Psychophysics	0.3	9
Perceptual and Motor Skills	0.5	13
Physical & Occupational Therapy in Pediatrics	0.0	0
Physical Medicine & Rehabilitation	0.0	0
PLOS Genetics	0.0	0
PLOS Medicine	0.0	1
PLOS One	1.6	44
Psychological Reports	0.0	1
Psychological Science	0.3	8
Psychology and Aging	0.1	3
Reading and Writing Quarterly	0.5	14
Reading Research Quarterly	0.3	8
Research in Developmental Disabilities	0.6	17
Seminars in Speech and Language	1.3	35
Social Development	0.0	0
Speech Communication	0.6	16
Stroke	0.2	6
The Gerontologist	0.2	5
The Hearing Journal	0.2	5
The International Journal of Orofacial Myology	0.0	0
The Journal of Head Trauma Rehabilitation	0.1	3
The Journal of the American Medical Association	0.1	3
The Volta Review	0.4	11
Topics in Early Childhood Special Education	0.5	14
Topics in Language Disorders	2.0	54
Topics in Stroke Rehabilitation	0.4	12
Other (please specify)	17.0	461
<i>n</i> = 906.		

# JOURNALS BY IMPACT FACTOR CATEGORY

Another way of viewing the range of CSD journals is to consider them by Impact Factor category. Table C2 provides a listing of the journals in the *Audiology and Speech-Language Pathology* category, which was added to the Impact Factor indexes in 2011.

*Table C2.* Journals ordered by rank in the *Audiology and Speech-Language Pathology* Impact Factor category in the Science Citation Index.

	Abbreviated Journal Title		i)		<u>JCR</u>	<u>Data</u>			<ul><li><u>Eigenf</u></li></ul>	actor®_
Rank	(linked to journal information)	ISSN	Total Cites	Impact	5-Year	Immedia cy	Articles	Cited	Eigenfac tor®	Article Influenc e ®
			cites	Factor	Impact Factor	Index		Half-life	Score	Score
1	BRAIN LANG	0093- 934X	6019	3.215	3.637	0.602	93	>10.0	0.00926	1.228
2	HEARING RES	0378- 5955	8327	2.968	3.143	1.238	130	>10.0	0.01355	1.068
3	EAR HEARING	0196- 0202	3949	2.842	3.108	0.519	104	8.5	0.0065	0.984
4	AUGMENT ALTERN COMM	0743- 4618	738	2.588	1.84	1.12	25	7.9	0.00075	0.376
5	J SPEECH LANG HEAR R	1092- 4388	6186	2.07	2.795	0.302	182	9.1	0.00914	0.9
6	TRENDS AMPLIF	1084- 7138	464	1.923				6.9	0.001	
7	J FLUENCY DISORD	0094- 730X	678	1.891	2.064	0.857	21	8.1	0.00085	0.425
8	INT J AUDIOL	1499- 2027	2421	1.844	2.01	0.458	118	6.4	0.00488	0.585
9	AUDIOL NEURO-OTOL	1420- 3030	1359	1.705	2.113	0.182	44	8	0.00261	0.711
10	AM J SPEECH-LANG PAT	1058- 0360	1313	1.594	2.397	0.193	57	8.6	0.00234	0.8
11	J AM ACAD AUDIOL	1050- 0545	1633	1.583	1.86	0.179	78	8.3	0.00274	0.572
12	J ACOUST SOC AM	0001- 4966	37633	1.503	1.736	0.271	709	>10.0	0.03389	0.508
13	NOISE HEALTH	1463- 1741	926	1.477	1.899	0.276	58	6.5	0.00214	0.591
14	INT J LANG COMM DIS	1368- 2822	1326	1.471	1.785	1.107	56	6.7	0.00255	0.554
15	J COMMUN DISORD	0021- 9924	1414	1.449	1.864	0.146	41	>10.0	0.00199	0.588
16	AM J AUDIOL	1059- 0889	461	1.28	1.301	0.171	41	7	0.00082	0.38
17	INT J SPEECH-LANG PA	1754- 9507	487	1.239	1.325	0.938	64	3.6	0.00172	0.423
18	LANG SPEECH	0023- 8309	1067	1.04	1.348	0.125	24	>10.0	0.00127	0.695
19	LOGOP PHONIATR VOCO	1401- 5439	263	0.932	0.868	0.227	22	7	0.00061	0.318
20	SEMIN SPEECH LANG	0734- 0478	420	0.704		0.667	30	7.6	0.00069	
21	FOLIA PHONIATR LOGO	1021- 7762	736	0.592	0.949	1	8	>10.0	0.00109	0.349
22	CLIN LINGUIST PHONET	0269- 9206	817	0.575	0.726	0.143	63	8.4	0.00117	0.232
23	<u>PHONETICA</u>	0031- 8388	600	0.52	1.574	0.333	6	>10.0	0.00076	0.787
24	LANG COGN NEUROSCI	2327- 3798	38			0.32	100		0	

The remaining tables show journal data for the other categories in which the ASHA journals are ranked.

*Table C3.* Journals ordered by rank in the *Rehabilitation* Impact Factor category in the Science Citation Index.

	Abbreviated Journal		i)		<u>10</u>		genfacto	or® Metrics		
Rank	(linked to journal information)	ISSN	Tatal	Impact	5-Year	Immediacy		Cited	Eigenfac tor®	Article Influence
Kalik	,	15514	Total Cites	Factor	Impact	Index	Articles	Half-life	Score	Score
					Factor					
1	NEUROREHAB NEURAL RE	1545- 9683	3533	3.976	4.626	0.787	89	5	0.01091	1.402
2	<u>J PHYSIOTHER</u>	1836- 9553	326	3.708	3.337	0.083	24	2.8	0.00174	1.152
3	IEEE T NEUR SYS REH	1534- 4320	3094	3.188	3.625	0.664	122	5.9	0.00712	1.097
4	J ORTHOP SPORT PHYS	0190- 6011	4579	3.011	3.627	0.453	95	8.2	0.00767	1.123
5	J HEAD TRAUMA REHAB	0885- 9701	3011	2.92	4.008	1.039	77	8.4	0.00448	1.148
6	J NEUROENG REHABIL	1743- 0003	1995	2.74	3.512	0.383	167	4.5	0.00567	0.966
7	ARCH PHYS MED REHAB	0003- 9993	18588	2.565	2.967	0.616	307	>10.0	0.02327	0.939
8	PHYS THER	0031- 9023	9190	2.526	3.786	0.581	136	>10.0	0.01187	1.2
9	SUPPORT CARE CANCER	0941- 4355	6386	2.364	2.651	0.584	361	4.7	0.01789	0.823
10	CLIN REHABIL	0269- 2155	4502	2.239	2.784	0.375	112	8.3	0.0072	0.843
11	AM J PHYS MED REHAB	0894- 9115	4259	2.202	2.151	0.312	128	8.8	0.00687	0.678
12	J SPEECH LANG HEAR R	1092- 4388	6186	2.07	2.795	0.302	182	9.1	0.00914	0.9
13	DEV NEUROREHABIL	1751- 8423	758	2.05	2.506	0.255	51	4.3	0.00258	0.651
14	J HAND THER	0894- 1130	1047	2	2.061	0.25	36	9.6	0.00164	0.629
15	DISABIL REHABIL	0963- 8288	6341	1.985	2.135	0.318	286	6.4	0.01344	0.627
16	PHYSIOTHERAPY	0031- 9406	1335	1.911	2.031	0.306	49	9.9	0.00221	0.619
17	EUR J PHYS REHAB MED	1973- 9087	909	1.903	2.143	0.472	72	3.8	0.00309	0.568
18	J FLUENCY DISORD	0094- 730X	678	1.891	2.064	0.857	21	8.1	0.00085	0.425
19	BRAIN INJURY	0269- 9052	4685	1.808	2.126	0.305	177	8.2	0.00697	0.598
20	SPINAL CORD	1362- 4393	4076	1.804	1.846	0.365	189	8	0.00657	0.512
21	J NEUROL PHYS THER	1557- 0576	594	1.766	2.711	0.412	17	5.7	0.00164	0.906
22	MANUAL THER	1356- 689X	2360	1.714	2.417	0.375	96	5.8	0.00498	0.635
23	J REHABIL MED	1650- 1977	3798	1.683	2.455	0.308	146	6.1	0.00909	0.773
24	PHYS THER SPORT	1466- 853X	539	1.653	1.959	0.342	38	4.9	0.00127	0.539
25	J ELECTROMYOGR KINES	1050- 6411	4073	1.647	2.145	0.152	132	7.2	0.00749	0.611
26	AM J SPEECH-LANG PAT	1058- 0360	1313	1.594	2.397	0.193	57	8.6	0.00234	0.8
27	EUR J CANCER CARE	0961- 5423	1598	1.564	1.59	0.57	86	6	0.00364	0.483
28	PM&R	1934- 1482	1442	1.534	2.507	0.285	130	3.6	0.00761	0.854
29	J MANIP PHYSIOL THER	0161- 4754	1907	1.48	1.667	0.384	73	8.1	0.00246	0.391
30	INT J LANG COMM DIS	1368- 2822	1326	1.471	1.785	1.107	56	6.7	0.00255	0.554

31	PHYS OCCUP THER PEDI	0194- 2638	542	1.455	1.869	0.393	28	6.3	0.00119	0.573
32	TOP STROKE REHABIL	1074- 9357	1004	1.452	1.702	0.148	61	5.9	0.00248	0.528
33	J COMMUN DISORD	0021- 9924	1414	1.449	1.864	0.146	41	>10.0	0.00199	0.588
34	J REHABIL RES DEV	0748- 7711	3793	1.43	2.447	0.196	112	7.8	0.00598	0.731
35	ADAPT PHYS ACT Q	0736- 5829	650	1.324	1.542	0.25	20	>10.0	0.00063	0.412
36	DISABIL HEALTH J	1936- 6574	399	1.291	1.636	0.825	63	3.5	0.00148	0.527
37	INT J REHABIL RES	0342- 5282	1178	1.284	1.407	0.204	54	8.8	0.00181	0.421
38	J SPORT REHABIL	1056- 6716	691	1.276	1.574	0.243	37	6.6	0.00167	0.537
39	J GERIATR PHYS THER	1539- 8412	487	1.275	2.297	0.304	23	5.2	0.00132	0.648
40	INT J SPEECH-LANG PA	1754- 9507	487	1.239	1.325	0.938	64	3.6	0.00172	0.423
41	INT J OSTEOPATH MED	1746- 0689	177	1.2	1	0.893	28	3.9	0.00021	0.131
42	REHABIL NURS	0278- 4807	525	1.153	1.058	0.29	31	8	0.0008	0.292
43	NEUROREHABILITATION	1053- 8135	1586	1.124	1.568	0.121	174	5.7	0.00391	0.474
44	SCAND J OCCUP THER	1103- 8128	567	1.09	1.409	0.143	63	5.9	0.00092	0.293
45	PROSTHET ORTHOT INT	0309- 3646	1102	1.041	1.309	0.226	62	9.8	0.00155	0.381
46	PEDIATR PHYS THER	0898- 5669	636	1.035	1.219	0.391	46	6.7	0.00118	0.352
47	BRAZ J PHYS THER	1413- 3555	705	0.944	1.211	0.108	65	4.9	0.00161	0.28
48	PHYS MED REH CLIN N	1047- 9651	894	0.93	1.571	0.096	52	7.3	0.00175	0.519
49	CAN J OCCUP THER	0008- 4174	684	0.915	1.226	0.179	28	9.3	0.00083	0.329
50	AUST OCCUP THER J	0045- 0766	626	0.846	1.151	0.136	44	6.2	0.00119	0.289
51	OCCUP THER INT	0966- 7903	209	0.78	0.99	0.3	20	6.2	0.00048	0.305
52	PHYSIOTHER CAN	0300- 0508	572	0.771	1.2	0.442	43	9	0.00097	0.331
53	REHABILITATION	0034- 3536	388	0.731	0.842	0.078	51	6.4	0.00048	0.14
54	J BACK MUSCULOSKELET	1053- 8127	297	0.705	0.96	0.099	71	4.6	0.00095	0.298
55	SEMIN SPEECH LANG	0734- 0478	420	0.704		0.667	30	7.6	0.00069	
56	HONG KONG J OCCUP TH	1569- 1861	41	0.667	0.596	0	5		0.00011	0.137
57	BRIT J OCCUP THER	0308- 0226	761	0.636	0.798	0.079	76	8.4	0.0008	0.155
58	FOLIA PHONIATR LOGO	1021- 7762	736	0.592	0.949	1	8	>10.0	0.00109	0.349
59	KINESIOLOGY	1331- 1441	155	0.585	0.595	0	47	6.7	0.00022	0.12
60	CLIN LINGUIST PHONET	0269- 9206	817	0.575	0.726	0.143	63	8.4	0.00117	0.232
61	J PHYS THER SCI	0915- 5287	572	0.392	0.414	0.121	454	2.7	0.00075	0.047
62	PHYS MED REHAB KUROR	0940- 6689	96	0.329	0.206	0.051	39		0.0001	0.038
63	J MUSCULOSKELET PAIN	1058- 2452	223	0.194	0.319	0.018	56	>10.0	0.00026	0.099
64	TURK FIZ TIP REHAB D	1302- 0234	83	0.136	0.111	0	75		0.00008	0.016

Table C4. Journals ordered by rank in the Otorhinolaryngology Impact Factor category in the Science Citation Index.

	Abbreviated Journal Title		i)		<u>J(</u>	CR Data_			Eigenfactor® Metrics		
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfa ctor® Score	Article Influence ® Score	
1	RHINOLOGY	0300- 0729	1975	3.761	2.331	0.529	68	7	0.00353	0.601	
2	HEARING RES	0378- 5955	8327	2.968	3.143	1.238	130	>10.0	0.01355	1.068	
3	EAR HEARING	0196- 0202	3949	2.842	3.108	0.519	104	8.5	0.0065	0.984	
4	HEAD NECK-J SCI SPEC	1043- 3074	8217	2.641	2.732	0.644	292	6.7	0.01688	0.813	
5	JARO-J ASSOC RES OTO	1525- 3961	1700	2.598	2.912	0.5	68	6.1	0.00494	1.132	
6	ARCH OTOLARYNGOL	0886- 4470	8817	2.327	2.305		0	>10.0	0.00857	0.79	
7	LARYNGOSCOPE	0023- 852X	17729	2.144	2.328	0.426	561	9.4	0.02564	0.688	
8	CLIN OTOLARYNGOL	1749- 4478	2311	2.113	2.727	0.303	33	>10.0	0.00294	0.901	
9	INT FORUM ALLERGY RH	2042- 6976	838	2.082	2.083	1.012	172	1.8	0.00282	0.563	
10	DYSPHAGIA	0179- 051X	2032	2.033	2.244	0.25	76	>10.0	0.00249	0.577	
11	OTOLARYNG HEAD NECK	0194- 5998	10487	2.02	1.974	0.389	324	8.9	0.01635	0.611	
12	TRENDS AMPLIF	1084- 7138	464	1.923				6.9	0.001		
13	INT J AUDIOL	1499- 2027	2421	1.844	2.01	0.458	118	6.4	0.00488	0.585	
14	CURR OPIN OTOLARYNGO	1068- 9508	1577	1.838	1.982	0.188	80	5.9	0.00409	0.649	
15	AM J RHINOL ALLERGY	1945- 8924	2976	1.81	1.936	1.125	128	6.2	0.00483	0.453	
16	JAMA OTOLARYNGOL	2168- 6181	337	1.794	1.794	0.353	150	1.4	0.00157	0.636	
17	OTOL NEUROTOL	1531- 7129	5060	1.787	2.016	0.248	330	6	0.01066	0.556	
18	AUDIOL NEURO-OTOL	1420- 3030	1359	1.705	2.113	0.182	44	8	0.00261	0.711	
19	ACTA OTORHINOLARYNGO	0392- 100X	945	1.64	1.518	0.059	51	6.6	0.00166	0.37	
20	J AM ACAD AUDIOL	1050- 0545	1633	1.583	1.86	0.179	78	8.3	0.00274	0.572	
21	EUR ARCH OTO-RHINO-L	0937- 4477	4635	1.545	1.571	0.258	453	5.2	0.01156	0.452	
22	OTOLARYNG CLIN N AM	0030- 6665	2020	1.49	1.758	0.078	64	9.4	0.00345	0.559	
23	AM J AUDIOL	1059- 0889	461	1.28	1.301	0.171	41	7	0.00082	0.38	
24	<u>J VOICE</u>	0892- 1997	2633	1.242	1.458	0.123	155	8.3	0.00383	0.339	
25	J VESTIBUL RES-EQUIL	0957- 4271	676	1.19	1.374	0.133	30	>10.0	0.00093	0.447	
26	INT J PEDIATR OTORHI	0165- 5876	5266	1.186	1.35	0.198	450	6.7	0.00951	0.35	

27	AURIS NASUS LARYNX	0385- 8146	1424	1.135	1.041	0.185	119	6	0.00334	0.318
28	ACTA OTO-LARYNGOL	0001- 6489	5876	1.099	1.164	0.142	190	>10.0	0.00635	0.357
29	ANN OTO RHINOL LARYN	0003- 4894	5520	1.094	1.316	0.094	128	>10.0	0.00447	0.428
30	ENT-EAR NOSE THROAT	0145- 5613	1411	1	0.987	0.02	49	>10.0	0.00144	0.302
31	AM J OTOLARYNG	0196- 0709	2035	0.984	1.113	0.156	167	8.9	0.00366	0.371
32	LOGOP PHONIATR VOCO	1401- 5439	263	0.932	0.868	0.227	22	7	0.00061	0.318
33	J OTOLARYNGOL-HEAD N	1916- 0216	1511	0.886	0.863	0.178	45	>10.0	0.00228	0.281
34	ORL J OTO-RHINO-LARY	0301- 1569	1068	0.88	0.94	0.149	47	9.8	0.00137	0.303
35	CLIN EXP OTORHINOLAR	1976- 8710	318	0.852	1.152	0.185	65	4	0.00127	0.336
36	LARYNGO RHINO OTOL	0935- 8943	768	0.836	0.625	0.096	83	>10.0	0.00049	0.083
37	EUR ANN OTORHINOLARY	1879- 7296	229	0.822		0.123	65	3.2	0.00103	
38	J LARYNGOL OTOL	0022- 2151	4432	0.672	0.743	0.373	225	>10.0	0.00502	0.227
39	BRAZ J OTORHINOLAR	1808- 8694	738	0.653		0.111	72	5.2	0.00195	
40	FOLIA PHONIATR LOGO	1021- 7762	736	0.592	0.949	1	8	>10.0	0.00109	0.349
41	HNO	0017- 6192	947	0.58	0.506	0.193	88	8.2	0.001	0.089
42	B-ENT	0001- 6497	273	0.431	0.465	0	53	5.6	0.00055	0.104
43	J INT ADV OTOL	1308- 7649	45	0.077	0.124	0.016	62		0.0002	0.035

*Table C5.* Journals ordered by rank in the *Linguistics* Impact factor Category in the Social Science Citation Index.

	Abbreviated Journal Title		i)		JCR I	<u>Data</u>			i Eigenf	actor®_
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact	Immedia cy Index	Articles	Cited Half-life	Eigenfac tor®	Article Influenc e® Score
		0749-			Factor					
1	J MEM LANG	596X	7285	4.237	4.257	0.676	68	>10.0	0.00908	1.81
2	BRAIN LANG	0093- 934X	6019	3.215	3.637	0.602	93	>10.0	0.00926	1.228
3	RES LANG SOC INTERAC	0835- 1813	740	2.897	2.621	1.36	25	8.8	0.00233	1.681
4	LANG COGNITIVE PROC	0169- 0965	2123	2.134	2.377		0	8.4	0.00474	0.985
5	J SPEECH LANG HEAR R	1092- 4388	6186	2.07	2.795	0.302	182	9.1	0.00914	0.9
6	BILING-LANG COGN	1366- 7289	1391	2.009	2.862	0.755	49	6.4	0.00355	1.029
7	J FLUENCY DISORD	0094- 730X	678	1.891	2.064	0.857	21	8.1	0.00085	0.425
8	LANGUAGE	0097- 8507	2463	1.884	2.33	0.28	25	>10.0	0.00285	1.691
9	J SECOND LANG WRIT	1060- 3743	770	1.773	2.411	0.476	21	9.1	0.00131	0.913
10	<u>LINGUIST INQ</u>	0024- 3892	1866	1.711	1.832	0.217	23	>10.0	0.00263	1.542
11	ENGL SPECIF PURP	0889- 4906	786	1.659	1.96	0.267	30	9.7	0.00119	0.741
12	TOP LANG DISORD	0271- 8294	506	1.625	1.45	2.571	21	7.6	0.00097	0.558
13	LANG LEARN	0023- 8333	1910	1.612	2.353	0.089	45	>10.0	0.00377	1.073
14	J CHILD LANG	0305- 0009	2146	1.598	1.865	0.284	67	>10.0	0.00268	0.737
14	<u>J PHONETICS</u>	0095- 4470	1926	1.598	1.958	0.286	49	>10.0	0.00316	0.837
16	AM J SPEECH-LANG PAT	1058- 0360	1313	1.594	2.397	0.193	57	8.6	0.00234	0.8
17	STUD SECOND LANG ACQ	0272- 2631	1319	1.556	2.242	0.13	23	>10.0	0.00165	1.047
18	METAPHOR SYMBOL	1092- 6488	351	1.533	1.293	0.125	16	9.4	0.00058	0.486
19	APPL PSYCHOLINGUIST	0142- 7164	1723	1.512	2.006	0.524	42	>10.0	0.00251	0.891
20	LANG VAR CHANGE	0954- 3945	454	1.5	1.816	0.2	15	>10.0	0.0014	1.159
21	J NEUROLINGUIST	0911- 6044	833	1.489	1.632	0.344	32	6.6	0.00186	0.523
22	INT J LANG COMM DIS	1368- 2822	1326	1.471	1.785	1.107	56	6.7	0.00255	0.554
23	APPL LINGUIST	0142- 6001	1623	1.453	2.352	0.625	24	>10.0	0.00245	1.204
24	J COMMUN DISORD	0021- 9924	1414	1.449	1.864	0.146	41	>10.0	0.00199	0.588
25	LANG SPEECH HEAR SER	0161- 1461	1211	1.435	2.087	0.355	31	8.7	0.00214	0.733
26	FIRST LANG	0142- 7237	583	1.4		0.393	28	8.9	0.00077	
27	RECALL	0958- 3440	274	1.378	1.527	0.053	19	5.9	0.00073	0.506
28	SECOND LANG RES	0267- 6583	518	1.368	1.559	0.278	18	8.8	0.00093	0.627
29	THEOR LINGUIST	0301- 4428	175	1.273	1	0.667	15	9	0.00046	0.727
30	LANG TEACHING	0261- 4448	398	1.25	1.566	0.35	20	6.9	0.00142	0.84

31	INTERACT STUD	1572- 0373	297	1.244	1.51	0.227	22	5.8	0.00072	0.462
32	INT J SPEECH-LANG PA	1754- 9507	487	1.239	1.325	0.938	64	3.6	0.00172	0.423
33	COMPUT LINGUIST	0891- 2017	1407	1.226	1.775	0.724	29	>10.0	0.00157	0.822
34	COGN LINGUIST	0936- 5907	724	1.175	1.513	0.3	20	9.8	0.00137	0.723
35	LANG LEARN TECHNOL	1094- 3501	526	1.128	2.1	0.033	30	8.2	0.00102	0.797
36	NAT LANG LINGUIST TH	0167- 806X	800	1.123	1.414	0.714	42	>10.0	0.0026	1.23
37	MIND LANG	0268- 1064	939	1.089	1.836	0.414	29	>10.0	0.00159	0.747
38	LANG ACQUIS	1048- 9223	552	1.083	1.379	0.111	18	>10.0	0.00067	0.727
39	<u>J SEMANT</u>	0167- 5133	324	1.074	1.087	0.25	16	>10.0	0.00101	0.921
40	LANG SOC	0047- 4045	936	1.073	1.366	0.2	20	>10.0	0.0014	0.871
41	LANG TEACH RES	1362- 1688	359	1.067	1.216	0.217	23	6.8	0.00112	0.631
42	LANG SPEECH	0023- 8309	1067	1.04	1.348	0.125	24	>10.0	0.00127	0.695
43	INT J BILING EDUC BI	1367- 0050	472	1.027	1.253	0.3	40	5.9	0.0016	0.551
44	CHILD LANG TEACH THE	0265- 6590	265	1.025	0.98	0.182	22	8.3	0.00046	0.289
45	J LANG SOC PSYCHOL	0261- 927X	785	1.02	1.772	1	43	9.5	0.00161	0.822
46	J ENGL ACAD PURP	1475- 1585	456	1.019		0.607	28	6.5	0.00108	
46	LANG TEST	0265- 5322	647	1.019	1.634	0.133	30	>10.0	0.00118	0.603
48	COMPUT ASSIST LANG L	0958- 8221	425	1	1.459	0.103	29	6.7	0.00105	0.54
48	ENGL WORLD-WIDE	0172- 8865	137	1	1.05	0.083	12	6.6	0.00088	0.919
50	ANNU REV APPL LINGUI	0267- 1905	363	0.96	1.576	0	10	>10.0	0.00091	0.871
51	MOD LANG J	0026- 7902	1699	0.942	1.652	0.255	51	>10.0	0.00266	0.757
52	TESOL QUART	0039- 8322	1717	0.94	1.424	1.121	33	>10.0	0.00186	0.679
53	<u>J SOCIOLING</u>	1360- 6441	617	0.917	1.491	0	26	8.9	0.00146	0.789
54	J POLITENESS RES-LAN	1612- 5681	162	0.889	1.104	0.1	10	7.3	0.00052	0.686
55	FOREIGN LANG ANN	0015- 718X	541	0.875	0.826	0.189	37	>10.0	0.0007	0.232
56	J ENGL LINGUIST	0075- 4242	152	0.833	0.983	0.231	13	7.3	0.00073	0.767
57	J PRAGMATICS	0378- 2166	2607	0.831	0.997	0.2	135	9.5	0.00617	0.447
58	LANG SCI	0388- 0001	497	0.826	0.64	0.106	66	7.7	0.00147	0.32
59	J MULTILING MULTICUL	0143- 4632	414	0.79	0.742	0.326	43	9.7	0.00109	0.385
60	LANG POLICY-NETH	1568- 4555	148	0.758	0.883	0	18	6.5	0.00075	0.615
61	LINGUIST PHILOS	0165- 0157	880	0.733	1.096	0.154	13	>10.0	0.00134	1.016
62	SYSTEM	0346- 251X	1037	0.721	1.167	0.147	109	9.7	0.00165	0.403
63	<u>ELT J</u>	0951- 0893	600	0.72	0.83	0.206	34	10	0.00088	0.315
64	J LINGUIST	0022- 2267	440	0.714	0.926	0.333	15	>10.0	0.00094	0.725

65	PHONOLOGY	0952- 6757	318	0.708	1.161	0	9	>10.0	0.00092	0.929
66	INT J BILINGUAL	1367- 0069	396	0.697	1.187	0.405	37	7	0.00126	0.592
67	<u>GESTURE</u>	1568- 1475	230	0.692	1.062			7.4	0.00047	0.452
68	LANG INTERCULT COMM	1470- 8477	142	0.659	0.726	0.143	28	5.4	0.00038	0.226
69	LANG COMMUN	0271- 5309	563	0.658	0.658	1.167	42	>10.0	0.00074	0.311
70	INT J CORPUS LINGUIS	1384- 6655	229	0.65	1	0	20	6.5	0.001	0.587
71	TRANSL STUD	1478- 1700	56	0.649	0.489	0.158	19		0.00027	0.191
72	<u>LINGUA</u>	0024- 3841	1308	0.647	0.899	0.132	121	7.6	0.00489	0.563
73	NAT LANG ENG	1351- 3249	255	0.639	0.726	0.056	18	9.9	0.00044	0.289
74	TERMINOLOGY	0929- 9971	104	0.636	0.712	0	11	8.2	0.00019	0.231
75	J PSYCHOLINGUIST RES	0090- 6905	973	0.633	0.772	0.087	46	>10.0	0.00073	0.318
76	J QUANT LINGUIST	0929- 6174	200	0.622	0.788	0	17	9.2	0.00019	0.141
77	J LINGUIST ANTHROPOL	1055- 1360	332	0.618	1.159	0.062	16	9.8	0.00081	0.578
78	CAN MOD LANG REV	0008- 4506	412	0.588	0.772	0.095	21	>10.0	0.00057	0.355
79	CORPUS LINGUIST LING	1613- 7027	92	0.579	0.76	0.077	13		0.00037	0.467
79	INTERPRETING	1384- 6647	131	0.579	1.059	0	11	7.6	0.0002	0.248
81	CLIN LINGUIST PHONET	0269- 9206	817	0.575	0.726	0.143	63	8.4	0.00117	0.232
82	J PIDGIN CREOLE LANG	0920- 9034	77	0.56	0.559	0	14		0.00026	0.276
82	NAT LANG SEMANT	0925- 854X	375	0.56	1	0.2	10	>10.0	0.0012	1.213
84	TEXT TALK	1860- 7330	227	0.551	0.622	0.091	33	6.1	0.0011	0.402
85	LANG ASSESS Q	1543- 4303	166	0.55	0.857	0	20	6.4	0.00046	0.319
86	LANG AWARE	0965- 8416	211	0.548	0.676	0.087	23	8	0.00035	0.207
87	<u>DIACHRONICA</u>	0176- 4225	108	0.545	0.605	0.167	12	8.2	0.0005	0.412
88	PROBUS	0921- 4771	163	0.529	0.786	0	8	>10.0	0.0006	0.894
89	INT J LEXICOGR	0950- 3846	204	0.526	0.624	0.143	14	>10.0	0.0005	0.373
90	SYNTAX-UK	1368- 0005	191	0.522	0.803	0.083	12	9.1	0.00067	0.693
91	<u>PHONETICA</u>	0031- 8388	600	0.52	1.574	0.333	6	>10.0	0.00076	0.787
92	J INT PHON ASSOC	0025- 1003	225	0.515	0.795	0.105	19	9.4	0.00074	0.64
93	LINGUISTICS	0024- 3949	817	0.506	0.684	0.079	38	>10.0	0.0013	0.43
94	AFR LINGUIST	0065- 4124	27	0.5	0.4	0	20		0.00003	0.067
95	NARRAT INQ	1387- 6740	289	0.478	0.718	0.05	20	8.5	0.00056	0.321
96	ENGL LANG LINGUIST	1360- 6743	165	0.462	0.582	0.111	18	6.9	0.00049	0.313
97	TRANSLATOR	1355- 6509	139	0.458	0.352	0	19	>10.0	0.00022	0.198
98	LANG MATTERS	1022- 8195	43	0.457	0.333	0	21		0.00027	0.208
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99	GENDER LANG	1747- 6321	39	0.448		0	16		0.00027	
100	LIT LINGUIST COMPUT	0268- 1145	247	0.43	0.508	0.125	40	7.4	0.00057	0.199
101	FOLIA LINGUIST HIST	0168- 647X	36	0.429	0.364	0	9		0.00012	0.224
101	INT J SPEECH LANG LA	1748- 8885	78	0.429	0.544	0	6		0.00018	0.193
101	PRAGMAT SOC	1878- 9714	25	0.429	0.411	0.095	21		0.00023	0.253
104	WORLD ENGLISH	0883- 2919	499	0.419	0.805	0.2	30	>10.0	0.00082	0.326
105	ENGL TODAY	0266- 0784	214	0.414		0.029	34	7.5	0.00071	
106	INTERCULT PRAGMAT	1612- 295X	152	0.405	0.8	0.045	22	6	0.00069	0.453
107	J LANG IDENTITY EDUC	1534- 8458	172	0.395	0.694	0	24	7.7	0.00065	0.415
108	REV COGN LINGUIST	1877- 9751	36	0.387		0	15		0.00031	
109	STUD LANG	0378- 4177	270	0.386	0.583	0.077	26	>10.0	0.00076	0.415
110	LITERACY	1741- 4350	114	0.378	0.517	0	18	6.3	0.0004	0.28
111	J EAST ASIAN LINGUIS	0925- 8558	148	0.375	0.358	0.077	13	>10.0	0.00045	0.42
111	SLOVO SLOVESNOST	0037- 7031	65	0.375	0.28	0.143	14		0.00003	0.023
113	NORD J LINGUIST	0332- 5865	71	0.364	0.321	0.071	14		0.00015	0.172
114	J COMP GER LINGUIST	1383- 4924	74	0.357	0.543	0.5	6		0.00025	0.445
115	LANG EDUC-UK	0950- 0782	301	0.344	0.647	0.097	31	8.2	0.00078	0.319
116	SOC SEMIOT	1035- 0330	180	0.333		0.333	30	8.4	0.00029	
117	MULTILINGUA	0167- 8507	167	0.326	0.436	0.04	25	>10.0	0.0004	0.264
118	SPAN CONTEXT	1571- 0718	45	0.323	0.265	0	11		0.00019	0.177
119	RLA-REV LINGUIST TEO	0718- 4883	56	0.321	0.379	0	15		0.0002	0.189
120	J FR LANG STUD	0959- 2695	113	0.317	0.293	0.235	17	8.7	0.00004	0.025
121	FOLIA LINGUIST	0165- 4004	126	0.314	0.434	0.059	17	>10.0	0.00038	0.312
122	J GER LINGUIST	1470- 5427	44	0.312	0.328	0	11		0.00019	0.201
123	ARGUMENTATION	0920- 427X	187	0.311	0.38	0.261	23	>10.0	0.00015	0.072
124	INTERPRET TRANSL TRA	1750- 399X	35	0.304	0.322	0.08	25		0.00008	0.085
125	TARGET-NETH	0924- 1884	180	0.303	0.542	0.118	17	>10.0	0.00031	0.27
126	LEXIKOS	1684- 4904	71	0.302	0.234	0.05	20		0.00019	0.083
127	IRAL-INT REV APPL LI	1613- 4141	331	0.296		0.067	15	>10.0	0.00052	
128	ENGL TEACH-PRACT CRI	1175- 8708	106	0.295	0.378	0.067	30	5.6	0.00037	0.156
128	LANG LIT	0963- 9470	109	0.295	0.267	0.042	24	>10.0	0.0001	0.063
130	PRAGMATICS	1018- 2101	380	0.281	0.444	0.032	31	>10.0	0.00063	0.293
131	<u>LINGUIST TYPOL</u>	1430- 0532	170	0.273		0.083	12	9.3	0.0004	
131	REV SIGNOS	0718- 0934	64	0.273	0.295	0	21		0.00033	0.197
133	LANG LINGUIST-TAIWAN	1606- 822X	97	0.239	0.252	0.032	31		0.00026	0.112
134	J LANG POLIT	1569- 2159	117	0.231	0.339	0	34	7.6	0.00043	0.22

134	Z SPRACHWISS	0721-	66	0.231	0.581	0	6		0.00019	0.385
136	PRAGMAT COGN	9067	200	0.225	0.713	0		8.3	0.0005	0.308
137	LINGUIST REV	0907 0167-	252	0.211	0.47	0.133	15	>10.0	0.00053	0.399
138	FUNCT LANG	6318 0929-	63	0.2	0.571	0.25	8		0.0002	0.362
138	LANG HIST	998X 1759-	10	0.2	0.22	0	7		0	0.002
140	IBERICA	7536 1139-	91	0.19	0.528	0.056	18		0.00027	0.191
		7241 0020-				0.030		>10.0	0.00027	
141	INT J AM LINGUIST	7071 0003-	194	0.189	0.247		17	>10.0		0.176
142	AM SPEECH	1283 1932-	322	0.186	0.616	0	18	>10.0	0.00046	0.257
143	TRANSL INTERPRET STU	2798 0726-	18	0.185	0.281	0	15		0.00021	0.206
144	AUST J LINGUIST	8602	123	0.158	0.253	0.24	25	>10.0	0.00025	0.165
145	J AFR LANG LINGUIST	0167- 6164	39	0.154	0.143	0	6		0.00005	0.092
145	LANG PROBL LANG PLAN	0272- 2690	67	0.154	0.262	0.077	13		0.00012	0.112
147	ACROSS LANG CULT	1585- 1923	22	0.143	0.281	0	13		0.00023	0.231
147	SO AFR LINGUIST APPL	1607- 3614	104	0.143	0.253	0.03	33	7.1	0.00042	0.162
149	PORTA LINGUARUM	1697- 7467	35	0.136	0.153	0	38		0.00005	0.025
150	J CHINESE LINGUIST	0091- 3723	99	0.132	0.123	0.421	19		0.00009	0.068
151	<u>ONOMAZEIN</u>	0717- 1285	21	0.123	0.109	0.042	24		0.00014	0.066
152	NAMES .	0027- 7738	57	0.093	0.112	0	20		0.0002	0.129
153	REV FR LING APPL	1386- 1204	39	0.091	0.138	0.062	16		0.00008	0.058
153	REV ROUM LINGUIST	0035- 3957	18	0.091	0.084	0	10		0.00006	0.033
153	VIAL-VIGO INT J APPL	1697- 0381	12	0.091	0.267	0.286	7		0.00004	0.086
156	ESTUD FILOL-VALDIVIA	0071- 1713	31	0.077	0.089	0	10		0.00005	0.033
156	Z DIALEKTOL LINGUIST	0044- 1449	48	0.077	0.361				0.00005	0.088
158	POZ STUD CONTEMP LIN	1897- 7499	32	0.067	0.196	0	23		0.00035	0.156
159	RILCE-REV FILOL HISP	0213- 2370	15	0.064	0.063	0	34		0	0
160	HISPANIA-J DEV INTER	0018- 2133	161	0.054	0.13	0.07	43	>10.0	0.00018	0.045
161	EUR J ENGL STUD	1382- 5577	56	0.053	0.179	0.056	18		0.00013	0.086
162	J HIST PRAGMAT	1566- 5852	31	0.045	0.086	0	12		0.00011	0.123
163	INDOGER FORSCH	0019- 7262	55	0.042	0.154	0	18		0.00003	0.033
163	LING ANTVERP NEW SER	0304- 2294	28	0.042	0.179	0	19		0.00029	0.328
165	BABEL-AMSTERDAM	0521- 9744	47	0.041		0	12		0.00004	
166	ATLANTIS-SPAIN	0210- 6124	22	0.03	0.074	0	18		0.00002	0.016
167	REV ESP LINGUIST APL	0213- 2028	19	0.018	0.078	0	23		0.00005	0.034
168	ACTA LINGUIST HUNGAR	1216- 8076	50	0	0.05	0.067	15		0.00004	0.035
168	CIRC LINGUIST APL CO	1576-	4	0	0.014	0	25		0.00001	0.012
168	DIALECTOL GEOLINGUIS	4737 0942-	5	0	0.061	0	7		0	0
168	LANG COGN NEUROSCI	4040 2327-	38			0.32	100		0	
	<u></u>	3798				0.02				

*Table C6.* Journals ordered by rank in the *Rehabilitation* Impact Factor category in the Social Science Citation Index.

	Abbreviated Journal Title		Ü	JCR Data				<u>Eigenfactor®</u>		
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact	Immedia cy Index	Articles	Cited Half-life	Eigenfac tor® Score	Article Influenc e® Score
1	J HEAD TRAUMA REHAB	0885- 9701	3011	2.92	<b>Factor</b> 4.008	1.039	77	8.4	0.00448	1.148
2	EXCEPT CHILDREN	0014- 4029	1669	2.745	3.016	0.321	28	9.8	0.00266	1.339
3	AUGMENT ALTERN COMM	0743- 4618	738	2.588	1.84	1.12	25	7.9	0.00075	0.376
4	RES AUTISM SPECT DIS	1750- 9467	2229	2.212	2.7	0.263	179	3.6	0.00695	0.633
5	AJIDD-AM J INTELLECT	1944- 7515	455	2.164	2.774	0.333	36	3.8	0.00248	0.981
6	J OCCUP REHABIL	1053- 0487	1503	2.159	2.593	0.194	72	6.5	0.00334	0.783
7	J SPEECH LANG HEAR R	1092- 4388	6186	2.07	2.795	0.302	182	9.1	0.00914	0.9
8	DISABIL REHABIL	0963- 8288	6341	1.985	2.135	0.318	286	6.4	0.01344	0.627
9	J LEARN DISABIL-US	0022- 2194	2444	1.901	2.93	0.571	42	>10.0	0.004	1.252
10	J FLUENCY DISORD	0094- 730X	678	1.891	2.064	0.857	21	8.1	0.00085	0.425
11	RES DEV DISABIL	0891- 4222	4755	1.887	2.399	0.294	378	3.8	0.01394	0.612
12	REHABIL PSYCHOL	0090- 5550	1417	1.843	2.548	0.17	53	7.2	0.00314	0.894
13	BRAIN INJURY	0269- 9052	4685	1.808	2.126	0.305	177	8.2	0.00697	0.598
14	J INTELL DISABIL RES	0964- 2633	3767	1.788	2.655	0.378	98	8	0.00619	0.814
15	DYSLEXIA	1076- 9242	672	1.733	2.179	0.15	20	9.6	0.00098	0.646
16	ASSIST TECHNOL	1040- 0435	442	1.679	1.692	0.12	25	6.5	0.00082	0.438
17	J DEAF STUD DEAF EDU	1081- 4159	985	1.625	2.227	0.343	35	7.7	0.00174	0.711
17	TOP LANG DISORD	0271- 8294	506	1.625	1.45	2.571	21	7.6	0.00097	0.558
19	AM J SPEECH-LANG PAT	1058- 0360	1313	1.594	2.397	0.193	57	8.6	0.00234	0.8
20	EUR J CANCER CARE	0961- 5423	1598	1.564	1.59	0.57	86	6	0.00364	0.483
21	J DEV PHYS DISABIL	1056- 263X	685	1.557	1.51	0.107	56	6.3	0.00141	0.421
22	AM J OCCUP THER	0272- 9490	2722	1.532	1.722	1.878	74	>10.0	0.00268	0.454
23	INTELLECT DEV DISAB	1934- 9491	392	1.488	1.862	0.083	36	4.1	0.00156	0.615
24	INT J LANG COMM DIS	1368- 2822	1326	1.471	1.785	1.107	56	6.7	0.00255	0.554
25	PHYS OCCUP THER PEDI	0194- 2638	542	1.455	1.869	0.393	28	6.3	0.00119	0.573
26	J COMMUN DISORD	0021- 9924	1414	1.449	1.864	0.146	41	>10.0	0.00199	0.588
27	ANN DYSLEXIA	0736- 9387	582	1.444	2.113	0.417	12	>10.0	0.00088	0.895
28	LANG SPEECH HEAR SER	0161- 1461	1211	1.435	2.087	0.355	31	8.7	0.00214	0.733
29	J REHABIL RES DEV	0748- 7711	3793	1.43	2.447	0.196	112	7.8	0.00598	0.731
30	DISABIL HEALTH J	1936- 6574	399	1.291	1.636	0.825	63	3.5	0.00148	0.527

31	INT J REHABIL RES	0342-	1178	1.284	1.407	0.204	54	8.8	0.00181	0.421
32	FOCUS AUTISM DEV DIS	5282 1088-	320	1.265	2.33	0.15	20	4.6	0.00126	0.708
33	INT J SPEECH-LANG PA	3576 1754-	487	1.239	1.325	0.938	64	3.6	0.00172	0.423
34	J MUSIC THER	0507 0022- 2017	565	1.185	1.337	0	17	>10.0	0.00045	0.309
35	J INTELLECT DEV DIS	1366- 8250	894	1.178	1.903	0.053	38	7.7	0.00167	0.636
36	PSYCHIATR REHABIL J	1095- 158X	1067	1.169	1.525	0.407	54	7.9	0.00144	0.457
37	REHABIL NURS	0278- 4807	525	1.153	1.058	0.29	31	8	0.0008	0.292
38	J APPL RES INTELLECT	1360- 2322	1116	1.137	1.521	0.463	41	7.3	0.00191	0.45
39	<u>NEUROREHABILITATION</u>	1053- 8135	1586	1.124	1.568	0.121	174	5.7	0.00391	0.474
40	LEARN DISABIL RES PR	0938- 8982	565	1.118		0.368	19	9.1	0.00123	
41	SCAND J OCCUP THER	1103- 8128	567	1.09	1.409	0.143	63	5.9	0.00092	0.293
42	J DISABIL POLICY STU	1044- 2073	258	1		0.435	23	7.2	0.00058	
42	J MENT HEALTH RES IN	1931- 5864	104	1		0.25	20	3.8	0.00044	
44	NORD J MUSIC THER	0809- 8131	128	0.96	1.286	0.333	12	5.1	0.00021	0.233
45	CAN J OCCUP THER	0008- 4174	684	0.915	1.226	0.179	28	9.3	0.00083	0.329
46	SEX DISABIL	0146- 1044	490	0.846	1.084	0.079	38	>10.0	0.00058	0.255
47	J EARLY INTERVENTION	1053- 8151	436	0.828	1.354	0.25	8	>10.0	0.00067	0.512
48	<u>DISABIL SOC</u>	0968- 7599	1273	0.815	1.288	0.043	116	9	0.00201	0.4
49	OCCUP THER INT	0966- 7903 0748-	209	0.78	0.99	0.3	20	6.2	0.00048	0.30
50	EDUC TREAT CHILD	8491	596	0.773		0	30	8.3	0.00117	
51	J VISUAL IMPAIR BLIN	0145- 482X	780	0.736		0.196	46	8.6	0.00074	
52	<u>J REHABIL</u>	0022- 4154	298	0.686	0.588	0	16	>10.0	0.0003	0.19
53	REHABIL COUNS BULL	0034- 3552	393	0.676	0.785	0.136	22	>10.0	0.0004	0.23
54	BRIT J OCCUP THER	0308- 0226	761	0.636	0.798	0.079	76	8.4	0.0008	0.15
55	EDUC TRAIN AUTISM DE	2154- 1647	167	0.634	0.936	0.114	44	3.4	0.0007	0.25
56	J POLICY PRACT INTEL	1741- 1122	311	0.615	1.049	0.125	32	5.4	0.00095	0.36
57	FOLIA PHONIATR LOGO	1021- 7762	736	0.592	0.949	1	8	>10.0	0.00109	0.34
58	KINESIOLOGY	1331- 1441	155	0.585	0.595	0	47	6.7	0.00022	0.12
59	CLIN LINGUIST PHONET	9206 1540	817	0.575	0.726	0.143	63	8.4	0.00117	0.23
60	RES PRACT PERS SEV D	1540- 7969	282	0.568	0.837	0.471	17	8.3		0.24
61	LEARN DISABILITY Q	0731- 9487 1525-	522	0.564	1.156	0.5	18	>10.0	0.00075	0.49
62	COMMUN DISORD Q	7401 2047-	216	0.549		0.12	25	7.4		
63	INT J DEV DISABIL	3869	17	0.548	0.548	0	24		0.00007	0.15
64	ART PSYCHOTHER	0197- 4556 0002-	447	0.541	0.696	0.188	69	7.7	0.00035	0.09
65	AM ANN DEAF	736¥ 1539-	566	0.522	1.158	0.25	20	9.8	0.0007	0.329
66	OTJR-OCCUP PART HEAL	4492 1034-	338	0.462	0.813	0 074	20	9.4	0.00039	0.30
67	INT J DISABIL DEV ED	012Y 0042-	394	0.438	0.903	0.074	27 4	8.6	0.0006 0.00026	0.30
68 69	TOP GERIATR REHABIL	9630 0882-	241	0.389	0.477	0.111	36	>10.0	0.00026	0.18
70	INFANT YOUNG CHILD	7524 0896- 3746	339	0.239	0.582	0.045	22	9.2		0.17